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OM protein - protein search, using sw model

Run on: March 18, 2004, 11:48:08 ; Search time 54.0335 Seconds
(without alignments)
3707.446 Million cell updates/sec

Title: US-09-945-258-14

Perfect score: 3687

Sequence: 1 MATAGGSGADPQSRGILLRL.....INAKADVLFIAPRECAVSY 709

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A Geneseq 29Jan04:*

- 1: Geneseqp1980s:*
- 2: Geneseqp1990s:*
- 3: Geneseqp2000s:*
- 4: Geneseqp2001s:*
- 5: Geneseqp2002s:*
- 6: Geneseqp2003as:*
- 7: Geneseqp2003bs:*
- 8: Geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	3687	100.0	709	3 AAY97549	Ray97549 Human PAM
2	3687	100.0	709	4 AAU12272	AAU12272 Human PRO
3	3687	100.0	709	4 AAG63935	AAG63935 Amino aci
4	3687	100.0	709	4 AAM39096	AAM39096 Human pol
5	3687	100.0	709	5 AAU79385	AAU79385 Human pre
6	3687	100.0	709	5 AAU98012	AAU98012 Human ami
7	3687	100.0	709	6 ABO17716	ABO17716 Novel hum
8	3687	100.0	709	6 ABU80970	ABU80970 Human PRO
9	3687	100.0	709	6 ABU66670	ABU66670 Human PRO
10	3687	100.0	709	6 ABUS9751	ABUS9751 Novel sec
11	3687	100.0	709	6 ABO24941	ABO24941 Human sec
12	3687	100.0	709	6 ABU66946	ABU66946 Human sec
13	3687	100.0	709	6 ADA45721	ADA45721 Novel hum
14	3687	100.0	709	6 ADA76152	ADA76152 Human PRO
15	3687	100.0	709	6 ADA18802	ADA18802 Human PRO
16	3687	100.0	709	6 ADA61425	ADA61425 Homo sapi
17	3687	100.0	709	6 ADB19210	ADB19210 Novel hum
18	3687	100.0	709	6 ADB27751	ADB27751 Human PRO
19	3687	100.0	709	6 ADA62330	ADA62330 Novel hum
20	3687	100.0	709	6 ADB15794	ADB15794 Human PRO
21	3687	100.0	709	6 ADA47580	ADA47580 Human PRO
22	3687	100.0	709	6 ADA67375	ADA67375 Human PRO
23	3687	100.0	709	6 ADB30382	ADB30382 Human PRO
24	3687	100.0	709	6 ADA85678	ADA85678 Novel hum
25	3687	100.0	709	6 ADA96890	ADA96890 Human PRO

26	3687	100.0	709	6 ADA79194	Ada79194 Human PRO
27	3687	100.0	709	6 ADA87333	Ada87333 Novel hum
28	3687	100.0	709	6 ADB16535	Adb16535 Human PRO
29	3687	100.0	709	6 ADA91627	Ada91627 Novel hum
30	3687	100.0	709	6 ADB14690	Adb14690 Human PRO
31	3687	100.0	709	6 ADB18651	Adb18651 Novel hum
32	3687	100.0	709	6 ADA93866	Ada93866 Human PRO
33	3687	100.0	709	6 ADB19762	Adb19762 Novel hum
34	3687	100.0	709	6 ADB13074	Adb13074 Human PRO
35	3687	100.0	709	6 ABO43249	ABO43249 Novel hum
36	3687	100.0	709	6 ADA74328	Ada74328 Human PRO
37	3687	100.0	709	6 ADB24561	Adb24561 Human PRO
38	3687	100.0	709	6 ADA82085	Ada82085 Human PRO
39	3687	100.0	709	6 ADA75048	Ada75048 Human PRO
40	3687	100.0	709	6 ADA85126	Ada85126 Novel hum
41	3687	100.0	709	6 ADA84574	Ada84574 Novel hum
42	3687	100.0	709	6 ADB29830	Adb29830 Human PRO
43	3687	100.0	709	6 ADA80358	Ada80358 Human PRO
44	3687	100.0	709	6 ADA75600	Ada75600 Human PRO
45	3687	100.0	709	6 ADA46825	Ada46825 Human PRO

ALIGNMENTS

RESULT 1
AAY97549
ID AAY97549 standard; protein; 709 AA.
XX AC AAY97549;
XX AC
DT 12-FEB-2001 (first entry)
XX DE
XX DE Human PAMP protein sequence.
XX KW PAMP; human; presenilin associated membrane protein; immunogen;
KW neurodegenerative disease; Alzheimer's disease; Lewy body variant;
KW Parkinson's disease-dementia complex; neuropsychiatric disease;
KW schizophrenia; age-associated memory loss; developmental disorder;
KW neoplasm; diagnosis.
XX OS Homo sapiens.
XX PN WO200060069-A1.
XX PD 12-OCT-2000.
XX PF 03-APR-2000; 2000WO-CA000354.
XX PR 01-APR-1999; 99US-0127452P.
XX PR 30-DEC-1999; 99US-0173826P.
XX PA (UTOR) UNIV TORONTO GOVERNING COUNCIL.
XX PI St George- Hyslop PH, Fraser PE;
XX XX WPI; 2000-665001/64.
XX DR N-PSDB; AAA37885.
XX XX Isolated presenilin associated membrane proteins and nucleic acids
XX encoding them, useful for investigating and diagnosing Alzheimer's
XX disease and other neurodegenerative diseases.
XX PS Claim 2; Page 68-70; 79pp; English.
XX CC This sequence is the human presenilin associated membrane protein (PAMP)
XX of the invention. PAMP polypeptides may be used as an immunogen to
XX generate antibodies that recognise the PAMP polypeptide. The PAMP
XX nucleotide and protein sequence may also be used for diagnosing
XX individuals who are at risk or who have a variety of neurodegenerative
XX diseases (e.g. Alzheimer's disease, Lewy body variant, Parkinson's
XX disease-dementia complex), neuropsychiatric diseases (e.g. schizophrenia,
XX age-associated memory loss), developmental disorders, and neoplasms.

CC These may further be used to deduce the structural organisation and
 CC topology of PAMP, to identify proteins which interact with PAMP either in
 CC concert with presentin 1 (PS1) and PS2, or independently, and to create
 CC cell-free systems, transfected cell lines, and animal models of
 CC neurodegenerative and other diseases
 XX
 SQ Sequence 709 AA;

Query Match 100.0%; Score 3687; DB 3; Length 709;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MATAGGSGGADPSRGLRLLLSCVLLAGLCRGNVERKLYIPLNTAPCVRLNATHQI 60
 Db 1 MATAGGSGGADPSRGLRLLLSCVLLAGLCRGNVERKLYIPLNTAPCVRLNATHQI 60

QY 61 GCQSSISGDTGVIHVVEKEEDLQWLTDGPNPPYVLLSKHFTDLMKLGKRTSRIAG 120
 Db 61 GCQSSISGDTGVIHVVEKEEDLQWLTDGPNPPYVLLSKHFTDLMKLGKRTSRIAG 120

QY 121 LAVSLTKPSASGFSVQCPNDGFGVYSNGYGEFAHCHREIOWNSLGNGLAYEDFSFPI 180
 Db 121 LAVSLTKPSASGFSVQCPNDGFGVYSNGYGEFAHCHREIOWNSLGNGLAYEDFSFPI 180

QY 181 FLEDENETKVIKQCYQDHNLSQMSAPTPPLCAMQLFSHMAVISTATCRRSSIOSTF 240
 Db 181 FLEDENETKVIKQCYQDHNLSQMSAPTPPLCAMQLFSHMAVISTATCRRSSIOSTF 240

QY 241 SINPEIVCDPLSDYNNVMSMLKPINTTGLKPDPRVVAATRLDSRSFFNVNPAESA 300
 Db 241 SINPEIVCDPLSDYNNVMSMLKPINTTGLKPDPRVVAATRLDSRSFFNVNPAESA 300

QY 301 SFVTQAAAALOKAPDVTTLPRNMFVFFQGETFYIGSRMVYDMEKGFVPLENVD 360
 Db 301 SFVTQAAAALOKAPDVTTLPRNMFVFFQGETFYIGSRMVYDMEKGFVPLENVD 360

QY 361 SFVELGVALRTSLELWHTDPVSQKNESVRNQVEDLLATLEKSGAGVPAVILRRPNQSQ 420
 Db 361 SFVELGVALRTSLELWHTDPVSQKNESVRNQVEDLLATLEKSGAGVPAVILRRPNQSQ 420

QY 421 PLPSSLQRFELARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLN 480
 Db 421 PLPSSLQRFELARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLN 480

QY 481 TDTAKALADVATVGLRALYELAGTNSDVTQADPQVTVRLLYGFLTKANNSFQSLRQ 540
 Db 481 TDTAKALADVATVGLRALYELAGTNSDVTQADPQVTVRLLYGFLTKANNSFQSLRQ 540

QY 541 DLSRYLGDGFLQHYIAVSSPTNTTIVVQYALANLTGTVNLTRQCQDPSKVPSEKND 600
 Db 541 DLSRYLGDGFLQHYIAVSSPTNTTIVVQYALANLTGTVNLTRQCQDPSKVPSEKND 600

QY 601 EYSWVQGLHNETDRLPRCVSTARLARALSPAFELSQWSSSTSTSTSTSTSTSTST 660
 Db 601 EYSWVQGLHNETDRLPRCVSTARLARALSPAFELSQWSSSTSTSTSTSTSTSTST 660

QY 661 FLIASKELELITLVGFGILFSLIVYICINAKADVLFIAPREPQAVSY 709
 Db 661 FLIASKELELITLVGFGILFSLIVYICINAKADVLFIAPREPQAVSY 709

RESULT 2
 AAU12272
 ID AAU12272 standard; protein; 709 AA.
 XX
 AC AAU12272;
 XX
 DT 24-OCT-2001 (first entry)
 XX
 DE Human PR04317 polypeptide sequence.
 XX
 KW Human secretory and transmembrane; PRO; mammalian; cancer; lung; breast;
 KW prostate; cervical; tumour necrosis factor-alpha; TNF-alpha; cartilage;

KW ear; proliferation; glucose; free fatty acid; skeletal muscle; adipocyte;
 KW A-peptide; factor VIIA; gene therapy.
 XX
 OS Homo sapiens.
 XX WC200104066-A2.
 XX
 XX 07-JUN-2001.
 XX
 XX 01-DEC-2000; 2000WO-US032678.
 XX
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 09-DEC-1999; 99US-0170262P.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 01-MAR-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 03-MAR-2000; 2000US-0187202P.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 05-JUN-2000; 2000US-0209832P.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 (GETH) GENENTECH INC.
 Baker KP, Bersini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 Gerritsen MF, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 WPI; 2001-408281/43.
 N-PSDB; AAS21344.
 Isolated , secretory and transmembrane PRO polypeptide used to detect
 other PRO polypeptides, link bioactive molecules to cells expressing PRO
 polypeptides, and detect the presence of mammalian tumors e.g. lung,
 breast, prostate, cervical.
 Claim 12; Fig 202; 813pp; English.
 AAU12172-AAU12446 represent novel human secretory and transmembrane PRO
 polypeptides. The PRO polypeptides are useful to detect other PRO
 polypeptides, to link bioactive molecules to cells expressing PRO
 polypeptides, to modulate biological activities of cells expressing PRO
 polypeptides, and to detect the presence of mammalian lung, colon,
 breast, prostate, rectal, cervical or liver tumours by comparing PRO

CC polypeptide expression in a cell sample to that in a control sample. Some
 CC of the 275 sequences are also useful to stimulate the release of tumour
 CC necrosis factor-alpha (TNF-alpha) from human blood, the proliferation or
 CC differentiation of chondrocytes, the proliferation or gene expression in
 CC pericyte cells, the release of proteoglycans from cartilage, the
 CC proliferation of inner ear utricular supporting cells or of T-
 CC lymphocytes, the release of a cytokine from peripheral blood monocytes
 CC (PBMCs), or the proliferation of endothelial cells. Some of the PRO
 CC polypeptides may modulate glucose or free fatty acid uptake by skeletal
 CC muscle cells or by adipocytes; or inhibit binding of A-peptide to factor
 CC VIIA. The PRO polypeptides can be used in assays to identify molecules
 CC involved in binding interactions. The polynucleotides encoding PRO
 CC polypeptides can be used to generate probes, antisense RNA/DNA,
 CC transgenic or knock out animals and can be used in gene therapy
 XX
 SQ Sequence 709 AA;

Query Match 100.0%; Score 3687; DB 4; Length 709;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MATAGGSGADPGSRGLRLLSFCVLLAGLCRNSVERKIYIPLNKTAFCVLLNATHOI 60
 DB 1 MATAGGSGADPGSRGLRLLSFCVLLAGLCRNSVERKIYIPLNKTAFCVLLNATHOI 60

QY 61 GCQSSISGDTGVHVVEKEEDLQWLTGDPNPPYVLLSKHFTDLMEKLGRTSRIAG 120
 DB 61 GCQSSISGDTGVHVVEKEEDLQWLTGDPNPPYVLLSKHFTDLMEKLGRTSRIAG 120

QY 121 LAVSLTKPSASGFSVQCPNDGFGVYNSGPEFAHCRFQWNSLGNLAYEDFSFPI 180
 DB 121 LAVSLTKPSASGFSVQCPNDGFGVYNSGPEFAHCRFQWNSLGNLAYEDFSFPI 180

QY 181 FLEEDENETKVIKQCYQDHNLSONGSAFTPLCAMOLFSSHMAVISTATCMRRSSIQSTF 240
 DB 181 FLEEDENETKVIKQCYQDHNLSONGSAFTPLCAMOLFSSHMAVISTATCMRRSSIQSTF 240

QY 241 SINPEIVCDPLSDYNNWSMLKPIINTGTLKPDPRVVAATRLDSRSFFWVAPGSAVA 300
 DB 241 SINPEIVCDPLSDYNNWSMLKPIINTGTLKPDPRVVAATRLDSRSFFWVAPGSAVA 300

QY 301 SFVTQLAAAEALQKAPDVTTLPRNVFVFQGETFDYIGSSRMVYDMKGFPPVQLENVD 360
 DB 301 SFVTQLAAAEALQKAPDVTTLPRNVFVFQGETFDYIGSSRMVYDMKGFPPVQLENVD 360

QY 361 SFVELGQVALRTSLELMHETDPSQKNSVRNQVEDLLATLEKSGAGVPAVILRRPNQSQ 420
 DB 361 SFVELGQVALRTSLELMHETDPSQKNSVRNQVEDLLATLEKSGAGVPAVILRRPNQSQ 420

QY 421 PLPPSSLQRFLEARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPWLSPEDLNIV 480
 DB 421 PLPPSSLQRFLEARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPWLSPEDLNIV 480

QY 481 TDTAKALADVAIVLGRALVELAGTNFSDTVQADPQTVTRLLYGLFIKANNWFQSIIRQ 540
 DB 481 TDTAKALADVAIVLGRALVELAGTNFSDTVQADPQTVTRLLYGLFIKANNWFQSIIRQ 540

QY 541 DLRSLVGDGPHOYIAVSPFTTYYVQALANLTGTVNLTREOCQDPSKVPSEKNDLY 600
 DB 541 DLRSLVGDGPHOYIAVSPFTTYYVQALANLTGTVNLTREOCQDPSKVPSEKNDLY 600

QY 601 EYSWVGQPLHNSNETDLPCVRSSTARALASPAFELSOWSSTESTWTSRWKDIRARI 660
 DB 601 EYSWVGQPLHNSNETDLPCVRSSTARALASPAFELSOWSSTESTWTSRWKDIRARI 660

QY 661 FLIASKELELITLVGFGILIFSLIVTYCINAKADVLFIAPREPQAVSY 709
 DB 661 FLIASKELELITLVGFGILIFSLIVTYCINAKADVLFIAPREPQAVSY 709

RESULT 3
 AAG63935
 ID AAG63935 standard; protein; 709 AA.

XX AAG63935;
 AC 29-OCT-2001 (first entry)
 DT Amino acid sequence of human KIAA0253.
 XX KIAA0253; presenilin; Alzheimer's disease.
 KW Homo sapiens.
 OS WO200167109-A1.
 PN 13-SEP-2001.
 PD 09-MAR-2001; 2001WO-GB001057.
 PF 10-MAR-2000; 2000GB-00005894.
 PR (GLAX) GLAXO GROUP LTD.
 PA Hale RS, Rowley A, Blackstock W;
 XX WPI; 2001-522960/57.
 DR N-PSDB; AAH74992.
 XX Identifying a modulator of presenilin function by determining the ability
 PT of presenilin to bind to a KIAA0253 polypeptide in the presence and
 PT absence of a test compound, useful in the treatment or prophylaxis of
 PT Alzheimer's disease.
 XX Claim 13; Page 34-36; 48pp; English.
 XX The present sequence represents human KIAA0253. KIAA0253 binds to
 CC presenilin. The specification describes a method of identifying a
 CC modulator of presenilin function or KIAA0253 function. The method
 CC comprises determining presenilin activity or KIAA0253 activity in the
 CC presence and absence of a test compound, where presenilin activity is
 CC determined by its ability to bind to KIAA0253. A modulator of presenilin
 CC or KIAA0253 polypeptide is useful in the manufacture of a medicament for
 CC the treatment or prophylaxis of Alzheimer's disease. The KIAA0253
 CC polynucleotide and KIAA0253 polypeptide are useful in the treatment,
 CC prophylaxis or diagnosis of Alzheimer's disease
 XX Sequence 709 AA;

Query Match 100.0%; Score 3687; DB 4; Length 709;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MATAGGSGADPGSRGLRLLSFCVLLAGLCRNSVERKIYIPLNKTAFCVLLNATHOI 60
 DB 1 MATAGGSGADPGSRGLRLLSFCVLLAGLCRNSVERKIYIPLNKTAFCVLLNATHOI 60

QY 61 GCQSSISGDTGVHVVEKEEDLQWLTGDPNPPYVLLSKHFTDLMEKLGRTSRIAG 120
 DB 61 GCQSSISGDTGVHVVEKEEDLQWLTGDPNPPYVLLSKHFTDLMEKLGRTSRIAG 120

QY 121 LAVSLTKPSASGFSVQCPNDGFGVYNSGPEFAHCRFQWNSLGNLAYEDFSFPI 180
 DB 121 LAVSLTKPSASGFSVQCPNDGFGVYNSGPEFAHCRFQWNSLGNLAYEDFSFPI 180

QY 181 FLEEDENETKVIKQCYQDHNLSONGSAFTPLCAMOLFSSHMAVISTATCMRRSSIQSTF 240
 DB 181 FLEEDENETKVIKQCYQDHNLSONGSAFTPLCAMOLFSSHMAVISTATCMRRSSIQSTF 240

QY 241 SINPEIVCDPLSDYNNWSMLKPIINTGTLKPDPRVVAATRLDSRSFFWVAPGSAVA 300
 DB 241 SINPEIVCDPLSDYNNWSMLKPIINTGTLKPDPRVVAATRLDSRSFFWVAPGSAVA 300

QY 301 SFVTQLAAAEALQKAPDVTTLPRNVFVFQGETFDYIGSSRMVYDMKGFPPVQLENVD 360
 DB 301 SFVTQLAAAEALQKAPDVTTLPRNVFVFQGETFDYIGSSRMVYDMKGFPPVQLENVD 360

361 SFVELGVALRTSLELWMHTDPVSKNESVRNOVEDLLATLEKSGAGVPAVILRRNQSO 420
 361 SFVELGVALRTSLELWMHTDPVSKNESVRNOVEDLLATLEKSGAGVPAVILRRNQSO 420
 421 PLPPSSLQRFELARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFFV 480
 421 PLPPSSLQRFELARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFFV 480
 481 TDTAKALADVAIVLGRALYELAGTNFSDTVQADPQTVTRLLYGLFIKANNWFQSIILRQ 540
 481 TDTAKALADVAIVLGRALYELAGTNFSDTVQADPQTVTRLLYGLFIKANNWFQSIILRQ 540
 541 DLRSYLGDPLOHYIAVSSPTNTTVVQYALANLTGTVVNLTRQCDPSKVPSEKNDLY 600
 541 DLRSYLGDPLOHYIAVSSPTNTTVVQYALANLTGTVVNLTRQCDPSKVPSEKNDLY 600
 601 EYSWVGQPLHSNETDRLPRCVSTARLARALSPAFELSQWSSTESTWTESRWKDIRARI 660
 601 EYSWVGQPLHSNETDRLPRCVSTARLARALSPAFELSQWSSTESTWTESRWKDIRARI 660
 661 FLIASKLELELITLVGFGILIFSLIVTYCINAKADVLFIAPREPAGVSY 709
 661 FLIASKLELELITLVGFGILIFSLIVTYCINAKADVLFIAPREPAGVSY 709

RESULT 4

AM39096
 ID AM39096 standard; protein; 709 AA.
 XX AM39096;
 XX
 DT 22-OCT-2001 (first entry)
 XX Human polypeptide SEQ ID NO 2241.
 DE
 XX Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
 KW peripheral nervous system; neuropathy; central nervous system; CNS;
 KW Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
 KW amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
 KW chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
 KW leukaemia.
 XX Homo sapiens.
 OS
 XX WO200153312-A1.
 PN
 XX 26-JUL-2001.
 PD
 XX 26-DEC-2000; 2000WO-US034263.
 PF
 XX 23-DEC-1999; 99US-00471275.
 PR 21-JAN-2000; 2000US-00488725.
 PR 25-APR-2000; 2000US-00552317.
 PR 20-JUN-2000; 2000US-00598042.
 PR 19-JUL-2000; 2000US-00620312.
 PR 03-AUG-2000; 2000US-00653450.
 PR 14-SEP-2000; 2000US-00662191.
 PR 19-OCT-2000; 2000US-00693036.
 PR 29-NOV-2000; 2000US-00727344.
 XX (HYSE-) HYSEQ INC.
 PA
 XX Tang YT, Liu C, Asundi V, Chen R, Ma Y, Qian XB, Ren F, Wang D;
 PI Wang J, Wang Z, Wehrman T, Xu C, Xue AJ, Yang Y, Zhang J, Zhao QB;
 PI Zhou P, Goodrich R, Drmanac RT;
 XX WPI; 2001-442253/47.
 DR N-PSDB; AA158252.
 XX Novel nucleic acids and polypeptides, useful for treating disorders such
 as central nervous system injuries.

PS Example 4; SEQ ID NO 2241; 10078pp; English.

XX The invention relates to human nucleic acids (AA157798-AA161369) and the
 CC encoded polypeptides (AM38642-AM442213) with nootropic,
 CC immunosuppressant and cytostatic activity. The polynucleotides are useful
 CC in gene therapy. A composition containing a polypeptide or polynucleotide
 CC of the invention may be used to treat diseases of the peripheral nervous
 CC system, such as peripheral nervous injuries, peripheral neuropathy and
 CC localised neuropathies and central nervous system diseases, such as
 CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
 CC lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
 CC utilisation of the activities such as: Immune system suppression,
 CC Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
 CC and thrombolytic activity, cancer diagnosis and therapy, drug screening,
 CC assays for receptor activity, arthritis and inflammation, leukaemia and
 CC C.N.S disorders. Note: The sequence data for this patent did not form
 CC part of the printed specification

XX Sequence 709 AA;

Query Match 100.0%; Score 3687; DB 4; Length 709;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MATAGGGGADPGSRGLRLLSFCVLLAGLCRNSVERKIYIPLNKTAFCVRLLNATHOI 60
 DB 1 MATAGGGGADPGSRGLRLLSFCVLLAGLCRNSVERKIYIPLNKTAFCVRLLNATHOI 60
 QY 61 GCQSSISGDTGVHVVKEEDLQWVLTGPNPNPYVVLLESKHFTRLDMKLGKRTSRIAG 120
 DB 61 GCQSSISGDTGVHVVKEEDLQWVLTGPNPNPYVVLLESKHFTRLDMKLGKRTSRIAG 120
 QY 121 LAVSLTKPSPASGSPSVOCPNDGFGVYSNCGPFAHCHREIQWNSLGNGLAYEDSFPI 180
 DB 121 LAVSLTKPSPASGSPSVOCPNDGFGVYSNCGPFAHCHREIQWNSLGNGLAYEDSFPI 180
 QY 181 FLEEDENETKVIKQCYQDHNLSQNGSAPTFPLCAMQLFSHMAVISTATCMRRSSIQSTF 240
 DB 181 FLEEDENETKVIKQCYQDHNLSQNGSAPTFPLCAMQLFSHMAVISTATCMRRSSIQSTF 240
 QY 241 SINPEIVCDPLSDYNVWSMLKPIINTGTLKPDPRVVAATRLDSRFFFNVPAPGASAVA 300
 DB 241 SINPEIVCDPLSDYNVWSMLKPIINTGTLKPDPRVVAATRLDSRFFFNVPAPGASAVA 300
 QY 301 SFVTQLAAAEALQKAPDVTTLPRNVMEVFQGETFDYIGSSRWVYDMKGFQVLENDV 360
 DB 301 SFVTQLAAAEALQKAPDVTTLPRNVMEVFQGETFDYIGSSRWVYDMKGFQVLENDV 360
 QY 361 SFVELGQVALRTSLELWMHTDPVSKNESVRNOVEDLLATLEKSGAGVPAVILRRNQSO 420
 DB 361 SFVELGQVALRTSLELWMHTDPVSKNESVRNOVEDLLATLEKSGAGVPAVILRRNQSO 420
 QY 421 PLPPSSLQRFELARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFFV 480
 DB 421 PLPPSSLQRFELARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFFV 480
 QY 481 TDTAKALADVAIVLGRALYELAGTNFSDTVQADPQTVTRLLYGLFIKANNWFQSIILRQ 540
 DB 481 TDTAKALADVAIVLGRALYELAGTNFSDTVQADPQTVTRLLYGLFIKANNWFQSIILRQ 540
 QY 541 DLRSYLGDPLOHYIAVSSPTNTTVVQYALANLTGTVVNLTRQCDPSKVPSEKNDLY 600
 DB 541 DLRSYLGDPLOHYIAVSSPTNTTVVQYALANLTGTVVNLTRQCDPSKVPSEKNDLY 600
 QY 601 EYSWVGQPLHSNETDRLPRCVSTARLARALSPAFELSQWSSTESTWTESRWKDIRARI 660
 DB 601 EYSWVGQPLHSNETDRLPRCVSTARLARALSPAFELSQWSSTESTWTESRWKDIRARI 660
 QY 661 FLIASKLELELITLVGFGILIFSLIVTYCINAKADVLFIAPREPAGVSY 709
 DB 661 FLIASKLELELITLVGFGILIFSLIVTYCINAKADVLFIAPREPAGVSY 709

RESULT 5
AAU79385
ID AAU79385 standard; protein; 709 AA.
XX
AC
AAU79385;
XX
DT 02-JUL-2002 (first entry)
XX
DE Human presenilin associated membrane protein (PAMP).
XX
KW PAMP; Presenilin associated membrane protein; neuropsychiatric disorder;
KW neurodevelopmental disorder; schizophrenia; neurodegenerative disorder;
KW Alzheimer's disease; Lewy body variant; mild cognitive impairment;
KW depression; benign senescent forgetfulness; psychosis; schizoaffective;
KW schizotypal; schizophreniaform; delusional disorder; personality disorder;
KW schizoid personality disorder; schizotypal personality disorder;
KW paranoid personality disorder; human.
XX
OS Homo sapiens.
XX
XX WO200218434-A2.
FN
XX
XX 07-MAR-2002.
PD
XX
XX 31-AUG-2001; 2001WO-CA001243.
PF
XX
XX 01-SEP-2000; 2000US-0229889P.
PR
XX
XX (UTOR) UNIV TORONTO GOVERNING COUNCIL.
PA
XX
XX St George- Hyslop PH, Fraser PE;
PI
XX
XX WPI: 2002-329756/36.
DR
XX
XX N-PSDB; ABR48341.
XX
XX Use of (gene encoding) presenilin-associated membrane protein as reagent
PT for diagnosing individuals predisposed to or having
PT neuropsychiatric/neurodevelopmental disorder, or as therapeutic target
PT for treating disorder.
XX
XX Example 1; Fig 1A-B; 69pp; English.
PS
XX
XX The invention describes the use of presenilin-associated membrane protein
CC (PAMP) as a reagent for diagnosing individuals predisposed to or having
CC neuropsychiatric or neurodevelopmental disorder (NND), or for identifying
CC a compound useful for treating NND, or as a therapeutic target for
CC treatment of NND. The protein is useful for diagnosing individuals
CC predisposed to or having NND e.g. schizophrenia, by detecting mutation in
CC gene encoding PAMP by measuring level of transcriptional activity of the
CC gene, or by measuring PAMP activity which comprises PAMP expression level
CC or activity of a product of a PAMP modified substrate. Transgenic animal
CC models can be screened for compounds that modulate activity of PAMP and
CC the presenilins. The identified compounds, or gene therapy with PAMP, can
CC be used to treat neurodevelopmental disorders, neurodegenerative
CC disorders e.g. Alzheimer's disease and Lewy body variant, and
CC neuropsychiatric disorders such as depression, mild cognitive impairment
CC and benign senescent forgetfulness, schizophrenia and related psychoses
CC e.g. schizoaffective, schizotypal, schizophreniaform and delusional
CC disorders and personality disorders such as schizoid personality
CC disorder, schizotypal personality disorder and paranoid personality
CC disorder. This is the amino acid sequence of a human presenilin
CC associated membrane protein (PAMP), described in the invention
XX
XX Sequence 709 AA;
SQ

Query Match 100.0%; Score 3687; DB 5; Length 709;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MATAGGSGADPGSGLLLRLLSFCVLLAGLCRGNISVERKIYIPLNKTAPCVLLNATHOI 60
DB 1 MATAGGSGADPGSGLLLRLLSFCVLLAGLCRGNISVERKIYIPLNKTAPCVLLNATHOI 60

QY 61 GCSSISGDTGVHVVKEEDLQWVLTGPNPPYVWVLESKHTRLMFKLQKRTSRIAG 120
DB 61 GCSSISGDTGVHVVKEEDLQWVLTGPNPPYVWVLESKHTRLMFKLQKRTSRIAG 120
QY 121 LAVSLTKPSPASGSPSVOCNDGFGVYSNSVGPFAHCHREIQMNSLGNGLAYEDFSFPI 180
DB 121 LAVSLTKPSPASGSPSVOCNDGFGVYSNSVGPFAHCHREIQMNSLGNGLAYEDFSFPI 180
QY 181 FLEDENETKVIKQCYQDHNLSONGSAPTFPLCAMQLFSHMAVISTATCMRRSSIQSTF 240
DB 181 FLEDENETKVIKQCYQDHNLSONGSAPTFPLCAMQLFSHMAVISTATCMRRSSIQSTF 240
QY 241 SINPRIVCDPLSDYNVWMLKPIINTTGLKPDVVVAATRLDSRSFFWVAPGASAVA 300
DB 241 SINPRIVCDPLSDYNVWMLKPIINTTGLKPDVVVAATRLDSRSFFWVAPGASAVA 300
QY 301 SFVTQLAAAEALQKAPDVTTLPRNVWFVFFQGETFDYIGSSRMVYDMEKGPVQLENVD 360
DB 301 SFVTQLAAAEALQKAPDVTTLPRNVWFVFFQGETFDYIGSSRMVYDMEKGPVQLENVD 360
QY 361 SFVELGQVALRTSLBLWMHTDPVSQKNESVRNQVEDLLATLEKSGAGVPAVILRRPNQSQ 420
DB 361 SFVELGQVALRTSLBLWMHTDPVSQKNESVRNQVEDLLATLEKSGAGVPAVILRRPNQSQ 420
QY 421 PLPPSSLQRFLEARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFF 480
DB 421 PLPPSSLQRFLEARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFF 480
QY 481 TDTAKALADVATVLCRALYELAGTNFSDTVQADPTVTRLLYGLFKANNWFOSILRQ 540
DB 481 TDTAKALADVATVLCRALYELAGTNFSDTVQADPTVTRLLYGLFKANNWFOSILRQ 540
QY 541 DLRSYLGDPLOHYIAVSSPTNTTVVQYALANLGTVVNLTRQCQDPSKVPSENKDIY 600
DB 541 DLRSYLGDPLOHYIAVSSPTNTTVVQYALANLGTVVNLTRQCQDPSKVPSENKDIY 600
QY 601 EYSWQGPLHNSNETDLPRCVSTARLARASPAFELSQWSTESTYTESWKDIRARI 660
DB 601 EYSWQGPLHNSNETDLPRCVSTARLARASPAFELSQWSTESTYTESWKDIRARI 660
QY 661 FLIASKELELITLVGFGILFSLIVTYCINAKADVLFIAPREPGAVSY 709
DB 661 FLIASKELELITLVGFGILFSLIVTYCINAKADVLFIAPREPGAVSY 709

RESULT 6
AAU98012
ID AAU98012 standard; protein; 709 AA.
XX
AC AAU98012;
XX
DT 27-AUG-2002 (first entry)
DE Human aminopeptidase Nicastrin.
XX
KW Human; Nicastrin; aminopeptidase; Alzheimer's disease; presenilin;
KW amyloid precursor protein; APP; vaccine; nootropic; neuroprotective;
KW antiinflammatory; cardiant; cytostatic; inflammation; cancer;
KW cardiovascular disease; Notch.
OS Homo sapiens.
XX
XX Key Location/Qualifiers
XX FT Domain 207..503
XX FT /label= Aminopeptidase domain
XX FT /note= "This domain is claimed in claim 8"
XX
XX WO200229023-A1.
XX
XX 11-APR-2002.
XX
XX 02-OCT-2001; 2001WO-GB004390.
XX

02-OCT-2000; 2000GB-00024086.
 (INPH-) INPHARMATICA LTD.
 Fagan RJ, Overington JP, Swindells MB, Weir M;
 WPI; 2002-463232/49.
 N-PSDB; ABK52902.
 Nicastrin protein identified as an aminopeptidase, useful for diagnosis, prevention and treatment of a disease e.g. inflammation, cancer, or cardiovascular disease.
 Disclosure: Page 47; 68pp; English.
 The invention relates to a polypeptide consisting of the aminopeptidase domain (I) of the Nicastrin polypeptide. Nicastrin is included in the presenilin/B-APP (amyloid precursor protein) complex and is involved in Alzheimer's disease. Also included are an aminopeptidase inhibitor, for use in the treatment and diagnosis of Alzheimer's disease, which effectively inhibits the aminopeptidase activity of the Nicastrin polypeptide; a purified nucleic acid molecule which encodes (I); a vector comprising the nucleic acid; a host cell transformed with the vector; identifying (M1) a candidate ligand for the treatment of Alzheimer's disease, by testing the ability of an aminopeptidase inhibitor to bind to the Nicastrin polypeptide or to (I), and selecting as a candidate agent, an aminopeptidase inhibitor that effectively inhibits the biological activity of the polypeptide; a vaccine composition comprising (I) or its encoding nucleic acid; a transgenic or knockout non-human animal that has been transformed to express a higher, lower or absent level of (I); and diagnosing (M2) the susceptibility of a patient to Alzheimer's disease, by examining the Nicastrin polypeptide or gene sequence in the patient or in the tissue from the patient and diagnosing as susceptible those patients in which a mutation is contained in a region of the sequence that is responsible for aminopeptidase activity in the full length protein. A pharmaceutical based on the inhibitor, peptide, nucleic acid, vector or antibody is useful in therapy or diagnosis of inflammation, cancer, or cardiovascular disease. (M1) is useful for identifying a ligand which prevents the activity of the polypeptide as an aminopeptidase, and inhibits the interaction of the aminopeptidase domain of Nicastrin with a naturally-occurring peptide, such as the full length beta amyloid precursor protein (B-APP), the beta-secretase cleaved version of the B-APP, the alpha-secretase cleaved version of B-APP, presenilin 1, presenilin 2, or a member of the Notch protein family. The present sequence represents Nicastrin
 Sequence 709 AA;

Query Match 100.0%; Score 3687; DB 5; Length 709;
 Best Local Similarity 100.0%; P-Id. No. 0;
 Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MATAGGGGADPGSRGLRLLSFCVLLA GICRGNVSVERKTYIPLNKTPAPCVRLINATHQI 60
 DB 1 MATAGGGGADPGSRGLRLLSFCVLLA GICRGNVSVERKTYIPLNKTPAPCVRLINATHQI 60
 QY 61 GCOSSTSGDGTGVTHVVEKEEDLQWLTDGNPPVWLLESKHFTDRLMEKLGKTSRIAG 120
 DB 61 GCOSSTSGDGTGVTHVVEKEEDLQWLTDGNPPVWLLESKHFTDRLMEKLGKTSRIAG 120
 QY 121 LAVSLTKPSASGFSPSVQCPNDGFGVYSNGYGEFAHCRIOVNSLGNGLAYEDSFPI 180
 DB 121 LAVSLTKPSASGFSPSVQCPNDGFGVYSNGYGEFAHCRIOVNSLGNGLAYEDSFPI 180
 QY 181 FLLEDENETKVIKQCYQDNLSQNGSAPTPLCAQMLFSHMAVISTATQWRSSQSTF 240
 DB 181 FLLEDENETKVIKQCYQDNLSQNGSAPTPLCAQMLFSHMAVISTATQWRSSQSTF 240
 QY 241 SINPEIVCDPLSDYNVMSMLKPIINTTCTLPKDDRVVVAATRLDSRSPFNVAQSAVA 300
 DB 241 SINPEIVCDPLSDYNVMSMLKPIINTTCTLPKDDRVVVAATRLDSRSPFNVAQSAVA 300
 QY 301 SFVTQLAAAFALQKAPDVTTLPRNVMEFFQGETFDYIGSSRMVYDMEKGFVQLENVD 360

DB 301 SFVTQLAAAFALQKAPDVTTLPRNVMEFFQGETFDYIGSSRMVYDMEKGFVQLENVD 360
 QY 361 SFVELGQVALRTSLLELWMTDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRPNQSQ 420
 DB 361 SFVELGQVALRTSLLELWMTDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRPNQSQ 420
 QY 421 PLPSSLOQLRARNISGVVLAHSGAFHNKYQSYDYTAENINVSYPEWLSPEEDLNFV 480
 DB 421 PLPSSLOQLRARNISGVVLAHSGAFHNKYQSYDYTAENINVSYPEWLSPEEDLNFV 480
 QY 481 TDTAKALADVATVIGRALYELAGSTNFSPTVQADPQTVTRLLYGLIKANNWFQSLTQ 540
 DB 481 TDTAKALADVATVIGRALYELAGSTNFSPTVQADPQTVTRLLYGLIKANNWFQSLTQ 540
 QY 541 DLRSYLGDPQLQHYIAVSSPTNTTYVQVALANLTCTVWNLTRQCDPSKVPSENKDL 600
 DB 541 DLRSYLGDPQLQHYIAVSSPTNTTYVQVALANLTCTVWNLTRQCDPSKVPSENKDL 600
 QY 601 EYSWVGPLHSNETDLPRCVRSTARALSPAFELSQWSSSTESTYTSRWDKTRARI 660
 DB 601 EYSWVGPLHSNETDLPRCVRSTARALSPAFELSQWSSSTESTYTSRWDKTRARI 660
 QY 661 FLIASKELELITLVGFGILIFSLIVTYCINAKADVLFIAPREPGAVSY 709
 DB 661 FLIASKELELITLVGFGILIFSLIVTYCINAKADVLFIAPREPGAVSY 709

RESULT 7
 ABO17716
 ID ABO17716 standard; protein; 709 AA.
 XX
 AC ABO17716;
 XX
 DT 26-AUG-2003 (first entry)
 XX
 DE Novel human secreted and transmembrane protein PRO4317.
 XX
 KW Human; secreted and transmembrane protein; PRO; anti-inflammatory;
 KW antiarteriosclerotic; cardiant; anti-infertility; anti-HIV; cytostatic;
 KW antidiabetic; gene therapy; tumour necrosis factor (TNF)-alpha release;
 KW TNF-alpha release; cell proliferation; cell differentiation;
 KW gene expression modulator; proteoglycan release; cytokine release;
 KW tumour; inflammatory disease; organ failure; atherosclerosis;
 KW cardiac injury; infertility; birth defect; premature aging; AIDS;
 KW acquired immunodeficiency syndrome; cancer; diabetic complication;
 KW chromosome mapping; gene mapping; pharmaceutical; diagnostic; biosensor;
 KW bioreactor; tissue typing.
 OS Homo sapiens.
 XX
 PN US2003032156-A1.
 XX
 PD 13-FEB-2003.
 XX
 PF 06-MAY-2002; 2002US-00140474.
 XX
 PR 31-MAR-1997; 97WO-US005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 99WO-US000106.

PR	08-MAR-1999;	99WO-US005028.	PR	20-JUN-2001;	2001WO-US019692.
PR	10-MAR-1999;	99WO-US005190.	PR	21-JUN-2001;	2001US-00887879.
PR	20-APR-1999;	99WO-US008615.	PR	22-JUN-2001;	2001WO-US020116.
PR	14-MAY-1999;	99WO-US010733.	PR	29-JUN-2001;	2001WO-US021066.
PR	02-JUN-1999;	99WO-US012252.	PR	09-JUL-2001;	2001US-00908827.
PR	01-SEP-1999;	99WO-US020111.	PR	18-JUL-2001;	2001US-00908827.
PR	08-SEP-1999;	99WO-US020594.	PR	06-AUG-2001;	2001US-00924419.
PR	13-SEP-1999;	99WO-US020944.	PR	09-AUG-2001;	2001US-00927796.
PR	15-SEP-1999;	99WO-US021090.	PR	16-AUG-2001;	2001US-00931836.
PR	15-SEP-1999;	99WO-US021547.	PR	19-DEC-2001;	2001US-00028072.
PR	05-OCT-1999;	99WO-US023089.	XX		
PR	29-NOV-1999;	99WO-US028214.	XX		
PR	30-NOV-1999;	99WO-US028313.	XX		
PR	30-NOV-1999;	99WO-US028409.	PI	Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;	
PR	01-DEC-1999;	99WO-US028301.	PI	Ceritsen ME, Goddard A, Godowski FJ, Gurney AL, Sherwood S;	
PR	01-DEC-1999;	99WO-US028634.	PI	Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;	
PR	02-DEC-1999;	99WO-US028551.	XX		
PR	02-DEC-1999;	99WO-US028564.	DR	WPI; 2003-341980/32.	
PR	02-DEC-1999;	99WO-US028565.	DR	N-PSDB; ACD23953.	
PR	16-DEC-1999;	99WO-US030095.	XX		
PR	20-DEC-1999;	99WO-US030911.	XX		
PR	20-DEC-1999;	99WO-US030999.	PT	New secreted and transmembrane PRO nucleic acids, for treating	
PR	22-DEC-1999;	99WO-US030720.	PT	inflammation, organ failure, atherosclerosis, cardiac injury,	
PR	30-DEC-1999;	99WO-US031243.	PT	infertility, birth defects, premature aging, acquired immunodeficiency	
PR	30-DEC-1999;	99WO-US031274.	PT	syndrome (AIDS), or cancer.	
PR	05-JAN-2000;	2000WO-US000219.	XX		
PR	06-JAN-2000;	2000WO-US000277.	XX	Claim 12; Fig 202; 660pp; English.	
PR	06-JAN-2000;	2000WO-US000376.	XX		
PR	11-FEB-2000;	2000WO-US003565.	CC	The invention describes an isolated nucleic acid (1) comprising, or which	
PR	18-FEB-2000;	2000WO-US004341.	CC	has 80 % sequence identity to, or the full-length coding sequence of, one	
PR	18-FEB-2000;	2000WO-US004342.	CC	of 275 nucleotide sequences, and which encodes a corresponding	
PR	22-FEB-2000;	2000WO-US004414.	CC	polypeptide selected from 275 amino acid sequences, where all sequences	
PR	24-FEB-2000;	2000WO-US004914.	CC	are given in the specification. The polypeptide encoded by (1) is used to	
PR	24-FEB-2000;	2000WO-US005004.	CC	detect PRO polypeptides, link a bioactive molecule to a cell expressing a	
PR	01-MAR-2000;	2000WO-US005601.	CC	PRO polypeptide, modulate a biological activity of a cell, stimulate the	
PR	02-MAR-2000;	2000WO-US005746.	CC	release of tumour necrosis factor (TNF)-alpha from human blood, modulate	
PR	02-MAR-2000;	2000WO-US005841.	CC	the uptake of glucose or free fatty acid by cells, stimulate or inhibit	
PR	10-MAR-2000;	2000WO-US006319.	CC	the proliferation or differentiation of cells or gene expression,	
PR	15-MAR-2000;	2000WO-US006884.	CC	stimulate the release of proteoglycans, inhibit the binding of A-peptide	
PR	20-MAR-2000;	2000WO-US007377.	CC	from peripheral blood mononuclear cells, inhibit the binding of A-peptide	
PR	21-MAR-2000;	2000WO-US007532.	CC	to factor VIIA, or detect the presence of tumour in a mammal. The nucleic	
PR	30-MAR-2000;	2000WO-US008439.	CC	acid and polypeptide encoded by it, are useful for treating inflammatory	
PR	17-MAY-2000;	2000WO-US013705.	CC	diseases, organ failure, atherosclerosis, cardiac injury, infertility,	
PR	22-MAY-2000;	2000WO-US014042.	CC	birth defects, premature aging, acquired immunodeficiency syndrome	
PR	30-MAY-2000;	2000WO-US014941.	CC	(AIDS), cancer, or diabetic complications. The nucleic acid is useful as	
PR	02-JUN-2000;	2000WO-US015264.	CC	hybridisation probes, in chromosome and gene mapping, and in generating	
PR	28-JUL-2000;	2000WO-US020710.	CC	antisense RNA or DNA. The polypeptides are useful as pharmaceuticals,	
PR	11-AUG-2000;	2000WO-US022031.	CC	diagnostics, biosensors or bioreactors. Both are useful in tissue typing.	
PR	23-AUG-2000;	2000WO-US023522.	CC	This is the amino acid sequence of a novel human secreted and	
PR	24-AUG-2000;	2000WO-US023328.	CC	transmembrane PRO polypeptide	
PR	08-NOV-2000;	2000WO-US030952.	XX		
PR	10-NOV-2000;	2000WO-US030873.	SQ	Sequence 709 AA;	
PR	01-DEC-2000;	2000WO-US032678.			
PR	20-DEC-2000;	2000US-00747259.			
PR	20-DEC-2000;	2000WO-US034956.			
PR	28-FEB-2001;	2001US-00796498.			
PR	28-FEB-2001;	2001WO-US006520.			
PR	01-MAR-2001;	2001WO-US006666.			
PR	09-MAR-2001;	2001US-00802706.			
PR	14-MAR-2001;	2001US-00808689.			
PR	22-MAR-2001;	2001US-00816744.			
PR	05-APR-2001;	2001US-00828366.			
PR	10-MAY-2001;	2001US-00854208.			
PR	10-MAY-2001;	2001US-00854280.			
PR	18-MAY-2001;	2001US-00860216.			
PR	25-MAY-2001;	2001US-00866028.			
PR	25-MAY-2001;	2001US-00866034.			
PR	25-MAY-2001;	2001WO-US017092.			
PR	01-JUN-2001;	2001US-00872035.			
PR	01-JUN-2001;	2001WO-US017800.			
PR	05-JUN-2001;	2001US-00874503.			
PR	14-JUN-2001;	2001US-00882636.			
PR	19-JUN-2001;	2001US-00886342.			
PR	08-MAR-1999;	99WO-US005028.	PR	20-JUN-2001;	2001WO-US019692.
PR	10-MAR-1999;	99WO-US005190.	PR	21-JUN-2001;	2001US-00887879.
PR	20-APR-1999;	99WO-US008615.	PR	22-JUN-2001;	2001WO-US020116.
PR	14-MAY-1999;	99WO-US010733.	PR	29-JUN-2001;	2001WO-US021066.
PR	02-JUN-1999;	99WO-US012252.	PR	09-JUL-2001;	2001US-00908827.
PR	01-SEP-1999;	99WO-US020111.	PR	18-JUL-2001;	2001US-00908827.
PR	08-SEP-1999;	99WO-US020594.	PR	06-AUG-2001;	2001US-00924419.
PR	13-SEP-1999;	99WO-US020944.	PR	09-AUG-2001;	2001US-00927796.
PR	15-SEP-1999;	99WO-US021090.	PR	16-AUG-2001;	2001US-00931836.
PR	15-SEP-1999;	99WO-US021547.	PR	19-DEC-2001;	2001US-00028072.
PR	05-OCT-1999;	99WO-US023089.	XX		
PR	29-NOV-1999;	99WO-US028214.	XX		
PR	30-NOV-1999;	99WO-US028313.	XX		
PR	30-NOV-1999;	99WO-US028409.	PI	Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;	
PR	01-DEC-1999;	99WO-US028301.	PI	Ceritsen ME, Goddard A, Godowski FJ, Gurney AL, Sherwood S;	
PR	01-DEC-1999;	99WO-US028634.	PI	Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;	
PR	02-DEC-1999;	99WO-US028551.	XX		
PR	02-DEC-1999;	99WO-US028564.	DR	WPI; 2003-341980/32.	
PR	02-DEC-1999;	99WO-US028565.	DR	N-PSDB; ACD23953.	
PR	16-DEC-1999;	99WO-US030095.	XX		
PR	20-DEC-1999;	99WO-US030911.	XX		
PR	20-DEC-1999;	99WO-US030999.	PT	New secreted and transmembrane PRO nucleic acids, for treating	
PR	22-DEC-1999;	99WO-US030720.	PT	inflammation, organ failure, atherosclerosis, cardiac injury,	
PR	30-DEC-1999;	99WO-US031243.	PT	infertility, birth defects, premature aging, acquired immunodeficiency	
PR	30-DEC-1999;	99WO-US031274.	PT	syndrome (AIDS), or cancer.	
PR	05-JAN-2000;	2000WO-US000219.	XX		
PR	06-JAN-2000;	2000WO-US000277.	XX	Claim 12; Fig 202; 660pp; English.	
PR	06-JAN-2000;	2000WO-US000376.	XX		
PR	11-FEB-2000;	2000WO-US003565.	CC	The invention describes an isolated nucleic acid (1) comprising, or which	
PR	18-FEB-2000;	2000WO-US004341.	CC	has 80 % sequence identity to, or the full-length coding sequence of, one	
PR	18-FEB-2000;	2000WO-US004342.	CC	of 275 nucleotide sequences, and which encodes a corresponding	
PR	22-FEB-2000;	2000WO-US004414.	CC	polypeptide selected from 275 amino acid sequences, where all sequences	
PR	24-FEB-2000;	2000WO-US004914.	CC	are given in the specification. The polypeptide encoded by (1) is used to	
PR	24-FEB-2000;	2000WO-US005004.	CC	detect PRO polypeptides, link a bioactive molecule to a cell expressing a	
PR	01-MAR-2000;	2000WO-US005601.	CC	PRO polypeptide, modulate a biological activity of a cell, stimulate the	
PR	02-MAR-2000;	2000WO-US005746.	CC	release of tumour necrosis factor (TNF)-alpha from human blood, modulate	
PR	02-MAR-2000;	2000WO-US005841.	CC	the uptake of glucose or free fatty acid by cells, stimulate or inhibit	
PR	10-MAR-2000;	2000WO-US006319.	CC	the proliferation or differentiation of cells or gene expression,	
PR	15-MAR-2000;	2000WO-US006884.	CC	stimulate the release of proteoglycans, inhibit the binding of A-peptide	
PR	20-MAR-2000;	2000WO-US007377.	CC	from peripheral blood mononuclear cells, inhibit the binding of A-peptide	
PR	21-MAR-2000;	2000WO-US007532.	CC	to factor VIIA, or detect the presence of tumour in a mammal. The nucleic	
PR	30-MAR-2000;	2000WO-US008439.	CC	acid and polypeptide encoded by it, are useful for treating inflammatory	
PR	17-MAY-2000;	2000WO-US013705.	CC	diseases, organ failure, atherosclerosis, cardiac injury, infertility,	
PR	22-MAY-2000;	2000WO-US014042.	CC	birth defects, premature aging, acquired immunodeficiency syndrome	
PR	30-MAY-2000;	2000WO-US014941.	CC	(AIDS), cancer, or diabetic complications. The nucleic acid is useful as	
PR	02-JUN-2000;	2000WO-US015264.	CC	hybridisation probes, in chromosome and gene mapping, and in generating	
PR	28-JUL-2000;	2000WO-US020710.	CC	antisense RNA or DNA. The polypeptides are useful as pharmaceuticals,	
PR	11-AUG-2000;	2000WO-US022031.	CC	diagnostics, biosensors or bioreactors. Both are useful in tissue typing.	
PR	23-AUG-2000;	2000WO-US023522.	CC	This is the amino acid sequence of a novel human secreted and	
PR	24-AUG-2000;	2000WO-US023328.	CC	transmembrane PRO polypeptide	
PR	08-NOV-2000;	2000WO-US030952.	XX		
PR	10-NOV-2000;	2000WO-US030873.	SQ	Sequence 709 AA;	
PR	01-DEC-2000;	2000WO-US032678.			
PR	20-DEC-2000;	2000US-00747259.			
PR	20-DEC-2000;	2000WO-US034956.			
PR	28-FEB-2001;	2001US-00796498.			
PR	28-FEB-2001;	2001WO-US006520.			
PR	01-MAR-2001;	2001WO-US006666.			
PR	09-MAR-2001;	2001US-00802706.			
PR	14-MAR-2001;	2001US-00808689.			
PR	22-MAR-2001;	2001US-00816744.			
PR	05-APR-2001;	2001US-00828366.			
PR	10-MAY-2001;	2001US-00854208.			
PR	10-MAY-2001;	2001US-00854280.			
PR	18-MAY-2001;	2001US-00860216.			
PR	25-MAY-2001;	2001US-00866028.			
PR	25-MAY-2001;	2001US-00866034.			
PR	25-MAY-2001;	2001WO-US017092.			
PR	01-JUN-2001;	2001US-00872035.			
PR	01-JUN-2001;	2001WO-US017800.			
PR	05-JUN-2001;	2001US-00874503.			
PR	14-JUN-2001;	2001US-00882636.			
PR	19-JUN-2001;	2001US-00886342.			

Query Match 100.0%; Score 3687; DB 6; Length 709;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MATAGGGGADPGSRGLLRLLSFCVLLAGLCRGSVERKIYIPLNKTAFCVLLNATHOI 60
 |||||
 Db 1 MATAGGGGADPGSRGLLRLLSFCVLLAGLCRGSVERKIYIPLNKTAFCVLLNATHOI 60
 |||||

QY 61 GCQSSISGDTGVIHVVEKEEDLQWLTGDPNPPYVLLSKHFTDLMEKLGRTSRIAG 120
 |||||
 Db 61 GCQSSISGDTGVIHVVEKEEDLQWLTGDPNPPYVLLSKHFTDLMEKLGRTSRIAG 120
 |||||

QY 121 LAVSLTKPSPASGFSVQCNDGFGVYSNSVGPFAHCREIOWNSLGNLAYEFSFPI 180
 |||||
 Db 121 LAVSLTKPSPASGFSVQCNDGFGVYSNSVGPFAHCREIOWNSLGNLAYEFSFPI 180
 |||||

QY 181 FLEDENETKVKIQCQYQDHNLSONGSAFTPLCAMQLFSHMAVISTATCMRRSSIQSTF 240
 |||||
 Db 181 FLEDENETKVKIQCQYQDHNLSONGSAFTPLCAMQLFSHMAVISTATCMRRSSIQSTF 240
 |||||

QY 241 SINPEIVCDPLSDYNVWSMLKPINTTGLTKPDPRVVVAATRLDSRSFFWNVAPGSAVA 300

Db	241	SINPEIVCDPLSDYNVSMKLPINTTGLKPDRRVVAAATRLDSRSFFWVAFCAESAVA	300	PR	24-OCT-1997;	97US-0062814P.
				PR	24-OCT-1997;	97US-0062816P.
QY	301	SFTVQLAAALQKAPDVTTLPRNMFVFPQGETFDYIGSSRMVYDMKPKFPVQLENVD	360	PR	24-OCT-1997;	97US-0063045P.
				PR	24-OCT-1997;	97US-0063082P.
Db	301	SFTVQLAAALQKAPDVTTLPRNMFVFPQGETFDYIGSSRMVYDMKPKFPVQLENVD	360	PR	27-OCT-1997;	97US-0063127P.
				PR	27-OCT-1997;	97US-0063327P.
QY	361	SFVELGQVALRTSLELWMHTDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRPNQSO	420	PR	28-OCT-1997;	97US-0063329P.
				PR	28-OCT-1997;	97US-0063350P.
Db	361	SFVELGQVALRTSLELWMHTDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRPNQSO	420	PR	28-OCT-1997;	97US-0063351P.
				PR	29-OCT-1997;	97US-0063704P.
QY	421	PLPSSQLRFLARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFV	480	PR	29-OCT-1997;	97US-0063733P.
				PR	29-OCT-1997;	97US-0063735P.
Db	421	PLPSSQLRFLARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFV	480	PR	03-NOV-1997;	97US-0064248P.
				PR	03-NOV-1997;	97US-0064809P.
QY	481	TDKAKALADVATVIGRALYELAGTNSFDTVQADPQVTVTLGLYFLIKANNWFQSLTRQ	540	PR	12-NOV-1997;	97US-0065186P.
				PR	12-NOV-1997;	97US-0065846P.
Db	481	TDKAKALADVATVIGRALYELAGTNSFDTVQADPQVTVTLGLYFLIKANNWFQSLTRQ	540	PR	21-NOV-1997;	97US-0066364P.
				PR	24-NOV-1997;	97US-0066453P.
QY	541	DLRSYLGDGFLQHYIAVSSPTNTTYVQYALANLTGTVMNLTREQQDPSKVPSENKOLY	600	PR	24-NOV-1997;	97US-0066511P.
				PR	24-NOV-1997;	97US-0066770P.
Db	541	DLRSYLGDGFLQHYIAVSSPTNTTYVQYALANLTGTVMNLTREQQDPSKVPSENKOLY	600	PR	11-DEC-1997;	97US-0069212P.
				PR	11-DEC-1997;	97US-0069278P.
QY	601	EYSWVGPLHSNETDRLPRCVRSTARLARALSPAFELSQWSSTEYSTWTESRWKDIRARI	660	PR	11-DEC-1997;	97US-0069334P.
				PR	16-DEC-1997;	97US-0069694P.
Db	601	EYSWVGPLHSNETDRLPRCVRSTARLARALSPAFELSQWSSTEYSTWTESRWKDIRARI	660	PR	23-JAN-1998;	98US-0072320P.
				PR	04-FEB-1998;	98US-0073612P.
QY	661	FLIASKELELITITVGFGLIFSLIVTYCINAKADVLFIAPREPQAVSY	709	PR	09-FEB-1998;	98US-0074086P.
				PR	09-FEB-1998;	98US-0074092P.
Db	661	FLIASKELELITITVGFGLIFSLIVTYCINAKADVLFIAPREPQAVSY	709	PR	12-MAR-1998;	98US-0077791P.
				PR	25-MAR-1998;	98US-0078910P.
				PR	27-MAR-1998;	98US-0079294P.
				PR	27-MAR-1998;	98US-0079663P.
				PR	31-MAR-1998;	98US-0079728P.
				PR	12-JUN-1998;	98US-0080165P.
				PR	14-JUL-1998;	98WO-US012456.
				PR	28-AUG-1998;	98WO-US017888.
				PR	10-SEP-1998;	98WO-US018824.
				PR	14-SEP-1998;	98WO-US019093.
				PR	14-SEP-1998;	98WO-US019094.
				PR	16-SEP-1998;	98WO-US019177.
				PR	17-SEP-1998;	98WO-US019330.
				PR	17-SEP-1998;	98WO-US019437.
				PR	07-OCT-1998;	98WO-US021141.
				PR	29-OCT-1998;	98WO-US022991.
				PR	29-OCT-1998;	98WO-US022992.
				PR	20-NOV-1998;	98WO-US024855.
				PR	01-DEC-1998;	98WO-US025108.
				PR	05-JAN-1999;	99WO-US000106.
				PR	08-MAR-1999;	99WO-US005028.
				PR	10-MAR-1999;	99WO-US005190.
				PR	20-APR-1999;	99WO-US008615.
				PR	14-MAY-1999;	99WO-US010733.
				PR	02-JUN-1999;	99WO-US012252.
				PR	01-SEP-1999;	99WO-US020111.
				PR	08-SEP-1999;	99WO-US020594.
				PR	13-SEP-1999;	99WO-US020944.
				PR	15-SEP-1999;	99WO-US021090.
				PR	15-SEP-1999;	99WO-US021547.
				PR	05-OCT-1999;	99WO-US023089.
				PR	29-NOV-1999;	99WO-US028214.
				PR	30-NOV-1999;	99WO-US028313.
				PR	30-NOV-1999;	99WO-US028409.
				PR	01-DEC-1999;	99WO-US028301.
				PR	01-DEC-1999;	99WO-US028634.
				PR	02-DEC-1999;	99WO-US028551.
				PR	02-DEC-1999;	99WO-US028564.
				PR	16-DEC-1999;	99WO-US028565.
				PR	16-DEC-1999;	99WO-US030095.
				PR	20-DEC-1999;	99WO-US030911.
				PR	20-DEC-1999;	99WO-US030999.
				PR	30-DEC-1999;	99WO-US031243.

RESULT 8
ABU80970
ID ABU80970 standard; protein; 709 AA.
XX AC ABU80970;
XX DT 23-JUN-2003 (first entry)
XX DE Human PRO polypeptide #101.
XX KW Human; PRO polypeptide; secreted and transmembrane protein;
KW anti-PRO antibody; diagnostic assay; gene expression; diabetes;
KW bone disorder; cartilage disorder; rheumatoid arthritis; obesity;
KW sports injury; osteoarthritis; hyper-insulinaemia; hypo-insulinaemia;
KW hearing loss; coagulation disorder; stroke; heart attack; cardiac;
KW antidiabetic; anorectic; vulnery; antiarthritic; osteopathic;
KW antirheumatic; auditory; cerebroprotective; angiogenic.
XX OS Homo sapiens.
XX PN US2003004311-A1.
XX PD 02-JAN-2003.
XX PF 19-DEC-2001; 2001US-00028072.
XX PR 18-JUN-1997; 97US-0049911P.
PR 26-AUG-1997; 97US-0056974P.
PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059122P.
PR 18-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 19-SEP-1997; 97US-0059352P.
PR 19-SEP-1997; 97US-0059588P.
PR 24-SEP-1997; 97US-0059836P.
PR 17-OCT-1997; 97US-0062250P.
PR 17-OCT-1997; 97US-0062285P.
PR 17-OCT-1997; 97US-0062287P.
PR 17-OCT-1997; 97US-0063755P.

PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 18-FEB-2000; 2000WO-US0004341.
 PR 18-FEB-2000; 2000WO-US0004342.
 PR 22-FEB-2000; 2000WO-US0004414.
 PR 24-FEB-2000; 2000WO-US0004914.
 PR 24-FEB-2000; 2000WO-US0005004.
 PR 01-MAR-2000; 2000WO-US0005601.
 PR 02-MAR-2000; 2000WO-US0005746.
 XX
 PA (GETH) GENENTECH INC.
 XX
 XX Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen WE, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX
 XX WPI: 2003-352836/33.
 DR N-PSDB; ACA67094.
 DR
 XX
 XX New isolated PRO polypeptide useful for treating diabetes, rheumatoid
 PT arthritis, sports injuries, obesity, hearing loss in mammals, stroke, or
 PT heart attack.
 XX
 XX Claim 12; Fig 202; 643pp; English.
 XX
 CC The present invention relates to the isolation of novel human PRO
 CC polypeptides, and the polynucleotide sequences encoding them. The PRO
 CC polypeptides are secreted and transmembrane proteins. The PRO
 CC polypeptides and polynucleotides are useful for preparing a medicament
 CC useful in the treatment of diabetes, bone and/or cartilage disorders
 CC (e.g. rheumatoid arthritis, sports injuries, osteoarthritis), obesity,
 CC hyper- or hypo-insulinaemia, hearing loss, and coagulation disorders
 CC (e.g. stroke, heart attack). Anti-PRO antibodies are useful in diagnostic
 CC assays for PRO, by detecting its expression in specific cells, tissues or
 CC serum, and for affinity purification of PRO from recombinant cell culture
 CC or natural sources. ABU80870-ABU81144 represent the human PRO
 CC polypeptides of the invention. Note: the sequence data for this patent
 CC was obtained in electronic format directly from the USPTO web site at
 CC seqdata.uspto.gov/psipsdIDentry.html
 XX
 XX Sequence 709 AA;

Query Match 100.0%; Score 3687; DB 6; Length 709;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MATAGGSGADPGSGLRLLLSFCVLLAGLCRNSVERKIYIPLNKTAPCVRLNATHQI 60
 DB 1 MATAGGSGADPGSGLRLLLSFCVLLAGLCRNSVERKIYIPLNKTAPCVRLNATHQI 60
 QY 61 GCQSSISGDTGVIHVVEKEEDLQWVLTGDPNPPYVLLSKHFTDLMEKLGRTSRIAG 120
 DB 61 GCQSSISGDTGVIHVVEKEEDLQWVLTGDPNPPYVLLSKHFTDLMEKLGRTSRIAG 120
 QY 121 LAVSLTKPSAGFSFVSQCPNDGFGVYNSGPEFAHCREIQWNSLGNGLAYEDFSFPI 180
 DB 121 LAVSLTKPSAGFSFVSQCPNDGFGVYNSGPEFAHCREIQWNSLGNGLAYEDFSFPI 180
 QY 181 FILEDENETKVIKQCQDHNLSNGSAPTFLCAMLFSHMHAVISTATCMRSSTQSTF 240
 DB 181 FILEDENETKVIKQCQDHNLSNGSAPTFLCAMLFSHMHAVISTATCMRSSTQSTF 240
 QY 241 SINPEIVCDPLSDYNVWMLKPIINTGTLKPDORVVVAATRLDSRSFFWVAPGSAVA 300
 DB 241 SINPEIVCDPLSDYNVWMLKPIINTGTLKPDORVVVAATRLDSRSFFWVAPGSAVA 300
 QY 301 SFTVQLAAEAALQKAPDVTTLPNNVMFVFQGETFDYIGSSRMVYDMEKGFVQLENVD 360
 DB 301 SFTVQLAAEAALQKAPDVTTLPNNVMFVFQGETFDYIGSSRMVYDMEKGFVQLENVD 360

QY 361 SFVELGQVALRTSLELWMHETDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRNQSQ 420
 DB 361 SFVELGQVALRTSLELWMHETDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRNQSQ 420
 QY 421 PLPPSSLQRFRLARNISGVVLADHSGAFHKKYQSYIDTAENINVSYPWLSPEDLNQV 480
 DB 421 PLPPSSLQRFRLARNISGVVLADHSGAFHKKYQSYIDTAENINVSYPWLSPEDLNQV 480
 QY 481 TDTAKALADVATVLGRALYELAGGTNFSDTVOADPQTVTTRLLYGLFIKANNWFQSIIRQ 540
 DB 481 TDTAKALADVATVLGRALYELAGGTNFSDTVOADPQTVTTRLLYGLFIKANNWFQSIIRQ 540
 QY 541 DLRSYLGDGPHOYITAVSSPTNTTYVQVLANLGTGVVNLTRQCDPSKVPSENKDL 600
 DB 541 DLRSYLGDGPHOYITAVSSPTNTTYVQVLANLGTGVVNLTRQCDPSKVPSENKDL 600
 QY 601 EYSWVGQPLHNSNETDRLPRCVSTARLARALSPAFELSONSSTESTWTSRWKDIRARI 660
 DB 601 EYSWVGQPLHNSNETDRLPRCVSTARLARALSPAFELSONSSTESTWTSRWKDIRARI 660
 QY 661 FLIASKELELITLTGVFGILIFSLIVTYCINAKADVLFIAPEPGAVSY 709
 DB 661 FLIASKELELITLTGVFGILIFSLIVTYCINAKADVLFIAPEPGAVSY 709
 RESULT 9
 ABU66670
 ID ABU66670 standard; protein; 709 AA.
 XX
 AC ABU66670;
 XX
 DT 23-MAY-2003 (first entry)
 XX
 DE Human PRO polypeptide #101.
 XX
 KW Human; PRO polypeptide; secreted and transmembrane protein;
 KW tumour necrosis factor-alpha; TNF-alpha; blood; proliferation;
 KW differentiation; chondrocyte; tumour; genetic disorder; cytostatic.
 XX
 OS Homo sapiens.
 XX
 PN US2003036180-A1.
 XX
 PD 20-FEB-2003.
 XX
 PF 09-MAY-2002; 2002US-00143114.
 XX
 PR 31-MAR-1997; 97WO-US0005230.
 PR 12-JUN-1998; 98WO-US012456.
 PR 14-JUL-1998; 98WO-US014552.
 PR 28-AUG-1998; 98WO-US017888.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98WO-US019093.
 PR 14-SEP-1998; 98WO-US019094.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98WO-US019437.
 PR 07-OCT-1998; 98WO-US021141.
 PR 29-OCT-1998; 98WO-US022991.
 PR 29-OCT-1998; 98WO-US022992.
 PR 20-NOV-1998; 98WO-US024855.
 PR 01-DEC-1998; 98WO-US025108.
 PR 05-JAN-1999; 99WO-US000106.
 PR 08-MAR-1999; 99WO-US005028.
 PR 10-MAR-1999; 99WO-US005190.
 PR 20-APR-1999; 99WO-US008615.
 PR 14-MAY-1999; 99WO-US010733.
 PR 02-JUN-1999; 99WO-US012252.
 PR 01-SEP-1999; 99WO-US020111.
 PR 08-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US021090.
 PR 15-SEP-1999; 99WO-US021547.

05-OCT-1999; 99WO-US023089.
 29-NOV-1999; 99WO-US028214.
 30-NOV-1999; 99WO-US028313.
 01-DEC-1999; 99WO-US028409.
 01-DEC-1999; 99WO-US028301.
 01-DEC-1999; 99WO-US028634.
 02-DEC-1999; 99WO-US028551.
 02-DEC-1999; 99WO-US028564.
 02-DEC-1999; 99WO-US028565.
 16-DEC-1999; 99WO-US030095.
 20-DEC-1999; 99WO-US030311.
 20-DEC-1999; 99WO-US030399.
 22-DEC-1999; 99WO-US030720.
 30-DEC-1999; 99WO-US031243.
 30-DEC-1999; 99WO-US031274.
 05-JAN-2000; 2000WO-US000219.
 06-JAN-2000; 2000WO-US000277.
 06-JAN-2000; 2000WO-US000376.
 11-FEB-2000; 2000WO-US003565.
 18-FEB-2000; 2000WO-US004341.
 18-FEB-2000; 2000WO-US004342.
 22-FEB-2000; 2000WO-US004414.
 24-FEB-2000; 2000WO-US004914.
 24-FEB-2000; 2000WO-US005004.
 01-MAR-2000; 2000WO-US005601.
 02-MAR-2000; 2000WO-US005746.
 02-MAR-2000; 2000WO-US005841.
 10-MAR-2000; 2000WO-US006319.
 18-MAR-2000; 2000WO-US006884.
 20-MAR-2000; 2000WO-US007377.
 21-MAR-2000; 2000WO-US007532.
 30-MAR-2000; 2000WO-US008439.
 17-MAY-2000; 2000WO-US013705.
 22-MAY-2000; 2000WO-US014042.
 30-MAY-2000; 2000WO-US014941.
 02-JUN-2000; 2000WO-US015264.
 28-JUL-2000; 2000WO-US020710.
 11-AUG-2000; 2000WO-US022031.
 23-AUG-2000; 2000WO-US023522.
 24-AUG-2000; 2000WO-US023328.
 08-NOV-2000; 2000WO-US030952.
 10-NOV-2000; 2000WO-US030873.
 01-DEC-2000; 2000WO-US032678.
 20-DEC-2000; 2000US-00747259.
 20-DEC-2000; 2000WO-US034956.
 28-FEB-2001; 2001US-00796498.
 28-FEB-2001; 2001WO-US006520.
 01-MAR-2001; 2001WO-US006666.
 09-MAR-2001; 2001US-00802706.
 14-MAR-2001; 2001US-00808689.
 22-MAR-2001; 2001US-00816744.
 05-APR-2001; 2001US-00828366.
 10-MAY-2001; 2001US-00854208.
 10-MAY-2001; 2001US-00854280.
 18-MAY-2001; 2001US-00860216.
 25-MAY-2001; 2001US-00865028.
 25-MAY-2001; 2001US-00866034.
 25-MAY-2001; 2001WO-US017092.
 01-JUN-2001; 2001US-00872035.
 01-JUN-2001; 2001WO-US017800.
 05-JUN-2001; 2001US-00874503.
 14-JUN-2001; 2001US-00882636.
 19-JUN-2001; 2001US-00886342.
 20-JUN-2001; 2001WO-US019692.
 21-JUN-2001; 2001US-00887879.
 22-JUN-2001; 2001WO-US020116.
 29-JUN-2001; 2001WO-US021066.
 09-JUL-2001; 2001WO-US021735.
 18-JUL-2001; 2001US-00908827.
 20-JUN-2001; 2001US-00887879.
 22-JUN-2001; 2001WO-US020116.
 29-JUN-2001; 2001WO-US021066.
 09-JUL-2001; 2001WO-US021735.
 18-JUL-2001; 2001US-00908827.
 06-AUG-2001; 2001US-00924419.
 09-AUG-2001; 2001US-00927796.
 16-AUG-2001; 2001US-00931836.
 19-DEC-2001; 2001US-00028072.

XX PA (GETH) GENENTECH INC.
 XX PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX WPI; 2003-332040/31.
 DR N-PSDB; ACA03703.
 XX New secreted and transmembrane PRO nucleic acids, useful for gene
 PT therapy, in chromosome and gene mapping, as chromosome markers, in tissue
 PT typing, and in chromosome identification.
 XX Claim 12; Fig 202; 660pp; English.
 PS The present invention relates to the isolation of novel human PRO
 CC polypeptides, and the polynucleotide sequences encoding them. The PRO
 CC polypeptides are secreted and transmembrane proteins. The PRO
 CC polypeptides are useful for detecting other PRO polypeptides, for linking
 CC bioactive molecules to cells expressing PRO polypeptides, for modulating
 CC biological activities of cells expressing PRO polypeptides, and for
 CC identifying agonists or antagonists. The PRO polypeptides are useful for
 CC for stimulating the release of tumour necrosis factor (TNF)-alpha from
 CC human blood, for stimulating the proliferation or differentiation of
 CC chondrocytes, and detecting the presence of tumours. The polynucleotide
 CC sequences encoding PRO polypeptides are useful as hybridisation probes,
 CC in chromosome and gene mapping, in the generation of antisense RNA and
 CC DNA, in the preparation of PRO polypeptides, for generating transgenic
 CC animals or knockout animals, for the genetic analysis of individuals with
 CC genetic disorders, and in gene therapy. ABU66570-ABU66844 represent the
 CC human PRO polypeptides of the invention. Note: The sequence data for this
 CC patent was obtained in electronic format directly from the USPTO web site
 CC at seqdata.uspto.gov/psipdb/entry.html
 XX SQ Sequence 709 AA;
 Query Match 100.0%; Score 3687; DB 6; Length 709;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MATAGGSGADPGSRGLRLSLFCVLLAGLCRNSVERKIYIPLNKTAPCVRLNATHOI 60
 DB 1 MATAGGSGADPGSRGLRLSLFCVLLAGLCRNSVERKIYIPLNKTAPCVRLNATHOI 60
 QY 61 GCQSSISGDTGVHVVVEKEEDLQWVLTGPNPPYVLLSKHFTRLMEKLGKRTSRIAG 120
 DB 61 GCQSSISGDTGVHVVVEKEEDLQWVLTGPNPPYVLLSKHFTRLMEKLGKRTSRIAG 120
 QY 121 LAVSLTKPSAGFSPVQCPNDGFGVYNSYGPFAHCRFQWNSLGNGLAYEDEFPI 180
 DB 121 LAVSLTKPSAGFSPVQCPNDGFGVYNSYGPFAHCRFQWNSLGNGLAYEDEFPI 180
 QY 181 FLEDENETKVIKQCYQDNHLSQNSGAPTFPLCAMOLFSSHMAVISTATCMRRSSIQSTF 240
 DB 181 FLEDENETKVIKQCYQDNHLSQNSGAPTFPLCAMOLFSSHMAVISTATCMRRSSIQSTF 240
 QY 241 SINPEIVCDPLSDYNVWSMLKINTTGLTKPDRVVVAATRLDSRSFFVNWAPGASAVA 300
 DB 241 SINPEIVCDPLSDYNVWSMLKINTTGLTKPDRVVVAATRLDSRSFFVNWAPGASAVA 300
 QY 301 SFVTQLAAAEALQKAPDVTTTLPRNVMVFVQGETFDYIGSSRMVYDMEKGPVQLENVD 360
 DB 301 SFVTQLAAAEALQKAPDVTTTLPRNVMVFVQGETFDYIGSSRMVYDMEKGPVQLENVD 360
 QY 361 SFVELGQVALRTSLELMWHTDPVSKNESVRNQVEDLLATLKSAGVPAVILRRPNQSQ 420
 DB 361 SFVELGQVALRTSLELMWHTDPVSKNESVRNQVEDLLATLKSAGVPAVILRRPNQSQ 420
 QY 421 PLPPSSLQFLRARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPWLSPEDLNIV 480
 DB 421 PLPPSSLQFLRARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPWLSPEDLNIV 480

QY 481 TDTAKALADVATVILGRALYELAGTGFNSFTVQADPQTVTRLLYGLFIKANNSWFQSILRQ 540
 Db |||||
 481 TDTAKALADVATVILGRALYELAGTGFNSFTVQADPQTVTRLLYGLFIKANNSWFQSILRQ 540
 QY 541 DLRSYLGDPQLQHYIAVSSPTNTYVQVYALANLTGTVNLTREQCQDPSPKVPSEKNDLY 600
 Db |||||
 541 DLRSYLGDPQLQHYIAVSSPTNTYVQVYALANLTGTVNLTREQCQDPSPKVPSEKNDLY 600
 QY 601 EYSWVGPLHSNEDTDLPRCVRTARLARALSPAFELSQMSSTSEYTSWTESRWKDIRARI 660
 Db |||||
 601 EYSWVGPLHSNEDTDLPRCVRTARLARALSPAFELSQMSSTSEYTSWTESRWKDIRARI 660
 QY 661 FLIASKELELITLTVGGLIFSLIVTYCINAKADVLFIAPREPGAVSY 709
 Db |||||
 661 FLIASKELELITLTVGGLIFSLIVTYCINAKADVLFIAPREPGAVSY 709

RESULT 10
 ABUS9751
 ID ABUS9751 standard; protein; 709 AA.
 XX
 AC ABUS9751;
 XX
 DT 13-MAY-2003 (first entry)
 XX
 DE Novel secreted and transmembrane protein PRO4317.
 XX
 KW Human; PRO; hypertrophy of neonatal heart; angiogenesis; wound healing;
 KW cardiac insufficiency disorder; cancer; tumour; immune response;
 KW adrenal cortical capillary endothelial growth; c-fos induction;
 KW vascular endothelial growth factor inhibition; VEGF inhibition;
 KW endothelial cell growth inhibitor; T-lymphocytes stimulation;
 KW retinal neurons cell survival; rod photoreceptor cell survival;
 KW retinal disorder; retinitis pigmentosa; kidney disorder;
 KW mammalian kidney mesangial cell proliferation; Berger disease;
 KW dermatitis; herpeticiformis; Crohn's disease; chondrocyte proliferation;
 KW chondrocyte redifferentiation; sports injury; arthritis.
 XX
 OS Homo sapiens.
 XX
 XX US2003017563-A1.
 XX
 XX 23-JAN-2003.
 XX
 XX 07-MAY-2002; 2002US-00140808.
 XX
 XX 31-MAR-1997; 97WO-US005230.
 XX 12-JUN-1998; 98WO-US012456.
 XX 14-JUL-1998; 98WO-US014552.
 XX 28-AUG-1998; 98WO-US017888.
 XX 10-SEP-1998; 98WO-US019824.
 XX 14-SEP-1998; 98WO-US019094.
 XX 14-SEP-1998; 98WO-US019094.
 XX 14-SEP-1998; 98WO-US019177.
 XX 16-SEP-1998; 98WO-US019330.
 XX 17-SEP-1998; 98WO-US019437.
 XX 07-OCT-1998; 98WO-US021141.
 XX 29-OCT-1998; 98WO-US022992.
 XX 20-NOV-1998; 98WO-US024855.
 XX 01-DEC-1998; 98WO-US025108.
 XX 05-JAN-1999; 98WO-US000106.
 XX 08-MAR-1999; 98WO-US005028.
 XX 10-MAR-1999; 98WO-US005190.
 XX 20-APR-1999; 98WO-US008615.
 XX 14-MAY-1999; 98WO-US010733.
 XX 02-JUN-1999; 98WO-US012252.
 XX 01-SEP-1999; 98WO-US020111.
 XX 08-SEP-1999; 98WO-US020594.
 XX 13-SEP-1999; 98WO-US020944.
 XX 15-SEP-1999; 98WO-US021090.
 XX 15-SEP-1999; 98WO-US021547.
 XX 05-OCT-1999; 98WO-US023089.

PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 30-NOV-1999; 99WO-US028409.
 PR 01-DEC-1999; 99WO-US028301.
 PR 01-DEC-1999; 99WO-US028634.
 PR 02-DEC-1999; 99WO-US028551.
 PR 02-DEC-1999; 99WO-US028564.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 20-DEC-1999; 99WO-US030999.
 PR 22-DEC-1999; 99WO-US030720.
 PR 30-DEC-1999; 99WO-US031243.
 PR 30-DEC-1999; 99WO-US031274.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 06-JAN-2000; 2000WO-US000277.
 PR 06-JAN-2000; 2000WO-US000376.
 PR 11-FEB-2000; 2000WO-US000376.
 PR 18-FEB-2000; 2000WO-US004341.
 PR 18-FEB-2000; 2000WO-US004342.
 PR 22-FEB-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004914.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 01-MAR-2000; 2000WO-US005601.
 PR 02-MAR-2000; 2000WO-US005746.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 10-MAR-2000; 2000WO-US006319.
 PR 15-MAR-2000; 2000WO-US006884.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 21-MAR-2000; 2000WO-US007532.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 17-MAY-2000; 2000WO-US013705.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 22-MAR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 18-MAY-2001; 2001US-00854280.
 PR 25-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.
 XX

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W; Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S; Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z; WPI; 2003-149238/14.
N-PSDB; ABX89241.
Two hundred and seventy five nucleic acids encoding PRO polypeptides, useful for treating pericyte-associated tumors, diabetes and various bone and/or cartilage disorders, e.g. arthritis.

Claim 12; Fig 202; 659pp; English.

The invention describes an isolated human PRO polypeptide. The PRO polypeptides are useful in detecting PRO polypeptides in a sample, in linking a bioactive molecule to a cell expressing a PRO polypeptide, and in modulating at least one biological activity of a cell expressing a PRO polypeptide. PRO1312 stimulates hypertrophy of neonatal heart and is thus useful for treating cardiac insufficiency disorders. PRO1154 and PRO1186 stimulate adrenal cortical capillary endothelial growth, and PRO536, PRO943, PRO828, PRO1068 or PRO535, PRO826, PRO819, and PRO1126, PRO1360 and PRO1387 induce c-fos in endothelial cells, and are thus useful for treating conditions or disorders where angiogenesis would be beneficial, e.g. wound healing and antagonist of this polypeptide are useful for treating cancerous tumors. PRO812 inhibits vascular endothelial growth factor (VEGF) stimulated proliferation of endothelial cells and is thus useful for inhibiting endothelial cell growth in mammals which would be beneficial in inhibiting tumour growth. PRO826, PRO1068, PRO1184, PRO1346 and PRO1375 stimulate proliferation of stimulated T-lymphocytes and are therapeutically useful for enhancing immune response. PRO828, PRO826, PRO1068 or PRO132 enhance survival of retinal neurons cells (PRO1132 is also enhance survival/proliferation of rod photoreceptor cells) and therefore are useful for treating retinal disorders of injuries, e.g. retinitis pigmentosa, AMD. PRO819, PRO813 and PRO1066 induce proliferation of mammalian kidney mesangial cells, and therefore are useful for treating kidney disorders associated with decreased mesangial cell function such as Berger disease or other nephropathies associated with dermatitis, herpeticiformis or Crohn's disease. PRO1310, PRO844, PRO1312, PRO1192 and PRO1387 induce the proliferation and/or redifferentiation of chondrocytes in culture and are thus useful for treating sports injuries, and arthritis. This is the amino acid sequence of a novel human PRO protein

SQ Sequence 709 AA;

Query Match 100.0%; Score 3687; DB 6; Length 709;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MATAGGGGADPGSRGLRLLSFCVLLAGLCRGSVERKVIYPLNKTAPCVRLNATHOI 60
DB 1 MATAGGGGADPGSRGLRLLSFCVLLAGLCRGSVERKVIYPLNKTAPCVRLNATHOI 60
QY 61 GCSSISGDTGVIHVVEKEEDLQWLTDGPNPPYVLLSKHFTDLMKLGKRTSRIAG 120
DB 61 GCSSISGDTGVIHVVEKEEDLQWLTDGPNPPYVLLSKHFTDLMKLGKRTSRIAG 120
QY 121 LAYSLTKPSASGFSVQCPNDGFGVYSNGYGFPAHCHREIOWNSLGNGLAYEDFSFPI 180
DB 121 LAYSLTKPSASGFSVQCPNDGFGVYSNGYGFPAHCHREIOWNSLGNGLAYEDFSFPI 180
QY 181 FLEDENETKVIQCYODHNLSONGSAFTPLCAQOLFSSHMAVISTATCWRSSSQSTF 240
DB 181 FLEDENETKVIQCYODHNLSONGSAFTPLCAQOLFSSHMAVISTATCWRSSSQSTF 240
QY 241 SINPEIVCDPLSDYNVMSMLKPIINTTGLKPDORVVVAATRLDSRSFFNNVAPGASAVA 300
DB 241 SINPEIVCDPLSDYNVMSMLKPIINTTGLKPDORVVVAATRLDSRSFFNNVAPGASAVA 300
QY 301 SFTVQLAAALQKAPDVTTLPRNVMVFVFGQETFDVIGSSRMVYDMEKGFVQLENVD 360

DB 301 SFTVQLAAALQKAPDVTTLPRNVMVFVFGQETFDVIGSSRMVYDMEKGFVQLENVD 360
QY 361 SFVELGQVALRTSLLELWMHTDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRPNOSQ 420
DB 361 SFVELGQVALRTSLLELWMHTDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRPNOSQ 420
QY 421 PLPSSLQRFELRARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFF 480
DB 421 PLPSSLQRFELRARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFF 480
QY 481 TDTAKALADVATVIGRALYELAGTWFSDVQADPQVTRLLYGLFLKANNMFQSLTRQ 540
DB 481 TDTAKALADVATVIGRALYELAGTWFSDVQADPQVTRLLYGLFLKANNMFQSLTRQ 540
QY 541 DLRSYLDGDLQHYIAVSSPTNTTYVQYALANLTGTVNVLTREQCDPSKVPSEKNDLY 600
DB 541 DLRSYLDGDLQHYIAVSSPTNTTYVQYALANLTGTVNVLTREQCDPSKVPSEKNDLY 600
QY 601 EYSWVGPLHSNETDRLPRCVRSTARLARALSPAFELSQWSSTESTYTSWTSRWKDIRARI 660
DB 601 EYSWVGPLHSNETDRLPRCVRSTARLARALSPAFELSQWSSTESTYTSWTSRWKDIRARI 660
QY 661 FLIASKELELITLTGVGILIFSLIVTYCINAKADVLFIAPREPGAVSY 709
DB 661 FLIASKELELITLTGVGILIFSLIVTYCINAKADVLFIAPREPGAVSY 709
RESULT 11
ABO24941
ID ABO24941 standard; protein; 709 AA.
XX ABO24941;
AC ABO24941;
DT 05-SEP-2003 (first entry)
DE Human secreted/transmembrane protein (PRO) #101.
XX Human; PRO; secreted protein; transmembrane protein; tumour; cytostatic;
XX gene therapy; tumour necrosis factor-alpha; TNF-alpha; blood;
XX proteoglycan; cartilage; cytokine; peripheral blood mononuclear cell;
XX PMBC; glucose uptake; FFA; skeletal muscle cell; adipocyte cell;
XX chondrocyte cell proliferation; chondrocyte cell differentiation;
XX pericyte cell; inner ear utricular supporting cell; T-lymphocyte cell;
XX endothelial cell; A-peptide; factor VIIA.
XX Homo sapiens.
OS US2003036179-A1.
XX 20-FEB-2003.
XX 10-MAY-2002; 2002US-00142431.
XX 31-MAR-1997; 97WO-US005230.
XX 12-JUN-1998; 98WO-US012456.
XX 14-JUL-1998; 98WO-US014552.
XX 28-AUG-1998; 98WO-US017888.
XX 10-SEP-1998; 98WO-US018824.
XX 14-SEP-1998; 98WO-US019093.
XX 14-SEP-1998; 98WO-US019094.
XX 16-SEP-1998; 98WO-US019177.
XX 17-SEP-1998; 98WO-US019437.
XX 07-OCT-1998; 98WO-US021141.
XX 29-OCT-1998; 98WO-US022991.
XX 23-OCT-1998; 98WO-US022992.
XX 20-NOV-1998; 98WO-US024855.
XX 01-DEC-1998; 98WO-US025108.
XX 05-JAN-1999; 99WO-US000106.
XX 08-MAR-1999; 99WO-US005028.
XX 10-MAR-1999; 99WO-US005190.
XX 20-APR-1999; 99WO-US008615.
XX 14-MAY-1999; 99WO-US010733.

Db	61	GCSSISGDTGVHIVKEBEDLQWLIDGPNPIMVLLSKHFTRDMEKLGRTSRIAG	120	PR	14-SEP-1998;	98WO-US019093.
QY	121	LAVSLTKPSPASGFSVQCPNDGFGVYSNSYGPEFAHCHREIQWNSLGNGLAYEDFSFPI	180	PR	14-SEP-1998;	98WO-US019094.
Db	121	LAVSLTKPSPASGFSVQCPNDGFGVYSNSYGPEFAHCHREIQWNSLGNGLAYEDFSFPI	180	PR	16-SEP-1998;	98WO-US019330.
QY	181	FILEDENETKVIKQCYQDHNLSONGSAPTFLCAMQLFSHHAIVISTATCMRSSSQSTF	240	PR	17-SEP-1998;	98WO-US019437.
Db	181	FILEDENETKVIKQCYQDHNLSONGSAPTFLCAMQLFSHHAIVISTATCMRSSSQSTF	240	PR	07-OCT-1998;	98WO-US021141.
QY	241	SINPEIVCDPLSDYNWWSMLKPINTTGLKPDVVVAATRLDSRSPFNVAFCASAVA	300	PR	29-OCT-1998;	98WO-US022991.
Db	241	SINPEIVCDPLSDYNWWSMLKPINTTGLKPDVVVAATRLDSRSPFNVAFCASAVA	300	PR	29-OCT-1998;	98WO-US022992.
QY	301	SFTVTQAAAALOKAPDVTTLPRNVMFVFFQGETFDYIGSSRMVYDMEKGFVPQLENVD	360	PR	20-NOV-1998;	98WO-US024855.
Db	301	SFTVTQAAAALOKAPDVTTLPRNVMFVFFQGETFDYIGSSRMVYDMEKGFVPQLENVD	360	PR	01-DEC-1998;	98WO-US025108.
QY	361	SFVELGOVALRTSLELMMHTDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRNQSQ	420	PR	05-JAN-1999;	98WO-US000106.
Db	361	SFVELGOVALRTSLELMMHTDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRNQSQ	420	PR	08-MAR-1999;	98WO-US005028.
QY	421	PLPPSSI-QRFLARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNfV	480	PR	10-MAR-1999;	98WO-US005190.
Db	421	PLPPSSI-QRFLARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNfV	480	PR	20-APR-1999;	98WO-US008615.
QY	481	TDTAKALADVATVULGRALYELAGTNEFSDTQADPQVTRLLYGLFIKANNWFQSLTRQ	540	PR	14-MAY-1999;	98WO-US010733.
Db	481	TDTAKALADVATVULGRALYELAGTNEFSDTQADPQVTRLLYGLFIKANNWFQSLTRQ	540	PR	02-JUN-1999;	98WO-US012252.
QY	541	DLRSYLGDDGFLQHVIAVSSPTNTYVVOYALANLTGVVNLTRQCCODPSKVPSENKDL	600	PR	01-SEP-1999;	98WO-US020111.
Db	541	DLRSYLGDDGFLQHVIAVSSPTNTYVVOYALANLTGVVNLTRQCCODPSKVPSENKDL	600	PR	08-SEP-1999;	98WO-US020594.
QY	601	EYSWVQGLHSNETDRLPRCVRSTARLARALSPAFELSONSSTEYSPTWTSRWKDIRARI	660	PR	13-SEP-1999;	98WO-US020944.
Db	601	EYSWVQGLHSNETDRLPRCVRSTARLARALSPAFELSONSSTEYSPTWTSRWKDIRARI	660	PR	15-SEP-1999;	98WO-US021090.
QY	661	FLIASKELELITLVGFGILIFSLIVTYCINAKADVLFIAPRPPGAVSY	709	PR	15-SEP-1999;	98WO-US021547.
Db	661	FLIASKELELITLVGFGILIFSLIVTYCINAKADVLFIAPRPPGAVSY	709	PR	05-OCT-1999;	98WO-US023089.

RESULT 12
ABU66946
ID ABU66946 standard; protein; 709 AA.
XX
AC ABU66946;
XX
DT 27-MAY-2003 (first entry)
XX
DE Human secreted/transmembrane, PRO, protein SEQ ID 202.
XX
KW Human; secreted protein; transmembrane protein; PRO;
KW inflammatory disease; organ failure; atherosclerosis; cardiac injury;
KW infertility; birth defects; premature aging; AIDS; biosensor;
KW acquired immunodeficiency syndrome; cancer; diabetic complication;
KW Bcoreactor; tumour.
XX
OS Homo sapiens.
XX
PN US2003032155-A1.
XX
PD 13-FEB-2003.
XX
PF 03-MAY-2002; 2002US-00137865.
XX
PR 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.

PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001US-00867092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001US-00872035.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001US-00919692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001US-00920116.
 PR 29-JUN-2001; 2001US-00921066.
 PR 09-JUL-2001; 2001US-00921735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.
 XX

(GETH) GENENTECH INC.

Baker KP, Beresini M, Deforge L, Deenoyers L, Filvaroff E, Gao W;
 Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 Smith V, Stewart IA, Tamas D, Watanabe CK, Wood WI, Zhang Z;
 WPI; 2003-331925/31.
 N-PSDB; ACA04124.

New secreted and transmembrane nucleic acids and polypeptides, designated as PRO, useful for treating inflammation, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, or cancer.

Claim 12; Fig 202; 659pp; English.

The invention relates to an isolated nucleic acid comprising, or which is at least 80% identical to, or the full-length coding sequence of, any of the 275 nucleotide sequences, encoding the corresponding PRO polypeptide (one of 275 secreted or transmembrane proteins). The nucleic acid further comprises the full-length coding sequence of the DNA deposited under American Type Culture Collection (ATCC) accession number in a list given in the specification. Also included are vectors and host cells for producing PRO proteins, PRO fusion proteins, anti-PRO antibodies, PRO extracellular domains and mature sequences, methods of detecting PRO proteins, methods for stimulating the release of TNF-alpha (tumour necrosis factor alpha) from human blood, (and the proliferation of differentiation of chondrocyte cells, the proliferation of, or gene expression in pericyte cells, the release or proteoglycans from cartilage, proliferation of inner ear articular supporting cells, the proliferation of T-lymphocyte cells, the release of a cytokine from peripheral blood mononuclear cells (PBMC), or the proliferation of endothelial cells), a method for modulating the uptake of glucose or free fatty acid (FFA) by skeletal muscle cells, a method for inhibiting the binding of A-peptide to factor VIIA, or the differentiation of adipocyte cells, a method for detecting the presence of a tumour in a mammal and an oligonucleotide probe derived from any of the nucleotide sequences cited above. The nucleic acids and polypeptides are useful for treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS (acquired immunodeficiency syndrome), cancer, or diabetic complications. The nucleic acids are useful as hybridisation probes, in chromosome and gene mapping, and in generating antisense RNA or DNA. The polypeptides are useful as pharmaceuticals, diagnostics, biosensors or bioeffectors. Both are useful in tissue typing. The present sequence represents a PRO protein of the invention

SQ Sequence 709 AA;

Query Match 100.0%; Score 3687; DB 6; Length 709;
 Best Local Similarity 100.0%; Pred. No. 0;

	Matches	709;	Conservative	0;	Mismatches	0;	Indels	0;	Gaps	0;
QY	1	MATAGGSGADPGSGGLRLLSFCVLLAGLCRGSVERKIYIPLNKTAFCVRLLNATHQI	60							
Db	1	MATAGGSGADPGSGGLRLLSFCVLLAGLCRGSVERKIYIPLNKTAFCVRLLNATHQI	60							
QY	61	GCQSSISGDTGVIHVVEKEEDLQWLTDGPNPPYVLLLESKHFTRLMEKLGKRTSRIAG	120							
Db	61	GCQSSISGDTGVIHVVEKEEDLQWLTDGPNPPYVLLLESKHFTRLMEKLGKRTSRIAG	120							
QY	121	LAVSLTKPSAGSGFSPVOCNDGFGVYNSGPGFAHCREIQWNSLGNGLAYEDSFPI	180							
Db	121	LAVSLTKPSAGSGFSPVOCNDGFGVYNSGPGFAHCREIQWNSLGNGLAYEDSFPI	180							
QY	181	FLLEDENETKVIKQCYQDHNLSONGSAFTFPCAMQLFSHMAVISTATCMRRSSIQSTF	240							
Db	181	FLLEDENETKVIKQCYQDHNLSONGSAFTFPCAMQLFSHMAVISTATCMRRSSIQSTF	240							
QY	241	SINPEIVCDPLSDYVWNSMLKPIINTGTLKPDVVVAATRLDSRFFFWNAPGAESAVA	300							
Db	241	SINPEIVCDPLSDYVWNSMLKPIINTGTLKPDVVVAATRLDSRFFFWNAPGAESAVA	300							
QY	301	SFVTOLAAAEALQKAPDVTTLPRNVMFVFFQGETFDYIGSRMVYDMKGPVQLENVD	360							
Db	301	SFVTOLAAAEALQKAPDVTTLPRNVMFVFFQGETFDYIGSRMVYDMKGPVQLENVD	360							
QY	361	SFVELGQVALRTSLELMWHTDPVSKNESVRNQVEDLLATLEKSGAGVPAVILRRNQSQ	420							
Db	361	SFVELGQVALRTSLELMWHTDPVSKNESVRNQVEDLLATLEKSGAGVPAVILRRNQSQ	420							
QY	421	PLPPSSLOFLARNISGVVLADHSGAFHNKYQSYDTAENINVSYPWLSPEEDLNFI	480							
Db	421	PLPPSSLOFLARNISGVVLADHSGAFHNKYQSYDTAENINVSYPWLSPEEDLNFI	480							
QY	481	TITAKALADVATVGLGRALYELAGGTFSDTVQADPQTVTRLLYGLIKANNWFOQILRQ	540							
Db	481	TITAKALADVATVGLGRALYELAGGTFSDTVQADPQTVTRLLYGLIKANNWFOQILRQ	540							
QY	541	DLSYVIGDGLPHQHYTAVSSPTNTTVVQVALANLTGTVVNLTRQQCDSPKVPSEKNDLY	600							
Db	541	DLSYVIGDGLPHQHYTAVSSPTNTTVVQVALANLTGTVVNLTRQQCDSPKVPSEKNDLY	600							
QY	601	EYSWVGPLHSNETDLPCVSTARLARALAPAPELSONSSTSTSTSTSTSTSTSTSTST	660							
Db	601	EYSWVGPLHSNETDLPCVSTARLARALAPAPELSONSSTSTSTSTSTSTSTSTSTST	660							
QY	661	FLIASKELELITLVGFGILIFSLIVTYCINAKADVLFIAPREPAGVSY 709								
Db	661	FLIASKELELITLVGFGILIFSLIVTYCINAKADVLFIAPREPAGVSY 709								
RESULT 13										
ADA45721										
ID	ADA45721	standard; protein; 709 AA.								
XX	AC	ADA45721;								
XX	DT	20-NOV-2003 (first entry)								
XX	DE	Novel human secreted and transmembrane protein PRO4317.								
XX	KW	Human; secreted and transmembrane protein; PRO;								
XX	KW	Tumour necrosis factor alpha release; TNF-alpha release;								
XX	KW	glucose uptake modulator; PFA uptake modulator;								
XX	KW	cell proliferation stimulator; cell differentiation stimulator;								
XX	KW	cell differentiation inhibitor; cytokine release stimulator;								
XX	KW	lung tumour; colon tumour; breast tumour; prostate tumour; rectal tumour;								
XX	KW	cervical tumour; liver tumour; chromosome mapping; gene mapping;								
XX	OS	Homo sapiens.								
XX	PN	US2003022328-A1.								

XX PD 30-JAN-2003.
XX XX 16-APR-2002; 2002US-00123304.
XX XX 31-MAR-1997; 97WO-US005230.
PR 12-JUN-1998; 98WO-US012456.
PR 14-JUL-1998; 98WO-US014552.
PR 28-AUG-1998; 98WO-US017888.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019093.
PR 14-SEP-1998; 98WO-US019094.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 29-OCT-1998; 98WO-US022991.
PR 29-OCT-1998; 98WO-US022992.
PR 29-OCT-1998; 98WO-US022992.
PR 01-DEC-1998; 98WO-US024855.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 10-MAR-1999; 99WO-US005190.
PR 20-APR-1999; 99WO-US008615.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 08-SEP-1999; 99WO-US020594.
PR 13-SEP-1999; 99WO-US020944.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 05-OCT-1999; 99WO-US023089.
PR 29-NOV-1999; 99WO-US028214.
PR 30-NOV-1999; 99WO-US028313.
PR 30-NOV-1999; 99WO-US028409.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 02-DEC-1999; 99WO-US028551.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US028565.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US030999.
PR 22-DEC-1999; 99WO-US030720.
PR 30-DEC-1999; 99WO-US031243.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000277.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.

01-DEC-2000; 2000WO-US032678.
20-DEC-2000; 2000US-00747259.
20-DEC-2000; 2000WO-US034956.
28-FEB-2001; 2001US-00796498.
28-FEB-2001; 2001WO-US006520.
01-MAR-2001; 2001WO-US006666.
09-MAR-2001; 2001US-00802706.
14-MAR-2001; 2001US-00808689.
22-MAR-2001; 2001US-00816744.
05-APR-2001; 2001US-00828366.
10-MAY-2001; 2001US-00854208.
18-MAY-2001; 2001US-00854280.
25-MAY-2001; 2001US-00860216.
25-MAY-2001; 2001US-00866028.
25-MAY-2001; 2001WO-US017092.
01-JUN-2001; 2001US-00872035.
01-JUN-2001; 2001WO-US017800.
05-JUN-2001; 2001US-00874503.
14-JUN-2001; 2001US-00882636.
19-JUN-2001; 2001US-00886342.
20-JUN-2001; 2001WO-US019692.
21-JUN-2001; 2001US-00887879.
22-JUN-2001; 2001WO-US020116.
29-JUN-2001; 2001WO-US021066.
03-JUL-2001; 2001WO-US021735.
18-JUL-2001; 2001US-00908827.
06-AUG-2001; 2001US-00924419.
09-AUG-2001; 2001US-00927796.
16-AUG-2001; 2001US-00931836.
19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.
Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
WPI; 2003-584997/55.
N-PSDB; ADA45720.

Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers.

Claim 12; Fig 202; 659pp; English.

The invention describes 305 nucleic acids encoding PRO (secreted and transmembrane) polypeptides (I). (I) is useful for stimulating the release of TNF-alpha from human blood, for modulating the uptake of glucose or FFA by skeletal muscle cells or adipocyte cells, for stimulating the proliferation or differentiation of chondrocyte cells, for stimulating the proliferation of or gene expression in pericyte cells, for stimulating the release of proteoglycans from cartilage, for stimulating the proliferation of inner ear utricular supporting cells, for stimulating the proliferation of T-lymphocyte cells, for stimulating the release of a cytokine from PMVC cells, for inhibiting the binding of a peptide to factor VIIa, for inhibiting the differentiation of adipocyte cells, for stimulating proliferation of endothelial cells, for detecting the presence of tumour in a mammal. The tumour is lung, colon, breast, prostate, rectal, cervical or liver tumour. The oligonucleotide probes are useful for isolating genomic and cDNA nucleotide sequences or antisense probes. (I) is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. A polynucleotide (II) encoding (I) is useful in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and screening of therapeutically useful reagents, in gene therapy, for chromosome identification, as chromosome marker, and for generating probes. An anti-(I)-antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum, and for affinity purification of PRO from recombinant cell culture or natural

CC sources. (I) and (II) are useful for tissue typing. This is the amino
CC acid sequence of a novel human secreted and transmembrane PRO
CC polypeptide.
XX
SQ Sequence 709 AA;
Query Match 100.0%; Score 3687; DB 6; Length 709;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 MATAGGSGADPGSGRLRLLSFCVLLAGLCRNSVERKIYIPLNKTAFCVRLINATHOI 60
Db 1 MATAGGSGADPGSGRLRLLSFCVLLAGLCRNSVERKIYIPLNKTAFCVRLINATHOI 60
QY 61 GCOSISGDTGVTHVVEKEEDLQWLTDGPNPYMVLLESKHFTDRLMEKLGKRTSRIAG 120
Db 61 GCOSISGDTGVTHVVEKEEDLQWLTDGPNPYMVLLESKHFTDRLMEKLGKRTSRIAG 120
QY 121 LAVSLTKPSPASGFSVQCPNDFGVYSNSYGPFAHCREIQNSILGNGLAYEDFSFPI 180
Db 121 LAVSLTKPSPASGFSVQCPNDFGVYSNSYGPFAHCREIQNSILGNGLAYEDFSFPI 180
QY 181 FLEDENETKVIKQCYQDHNLSQNGSAPTPFLCAMQLFSHMAVISTATCMRESSIQSTF 240
Db 181 FLEDENETKVIKQCYQDHNLSQNGSAPTPFLCAMQLFSHMAVISTATCMRESSIQSTF 240
QY 241 SINFEIVCDPLSDYNWMSMLKPIITGTLKPDPRVVVATRLDSRSFFNNVAPGASAVA 300
Db 241 SINFEIVCDPLSDYNWMSMLKPIITGTLKPDPRVVVATRLDSRSFFNNVAPGASAVA 300
QY 301 SFTVQLAAAEALQKAPDVTTLPRNVMFVFPQGETFDYIGSSRMVYDMEKGFVPQLENVD 360
Db 301 SFTVQLAAAEALQKAPDVTTLPRNVMFVFPQGETFDYIGSSRMVYDMEKGFVPQLENVD 360
QY 361 SFVELGQVALRTSLELWMHTDPSVKNESVRNQVEDLLATLEKSGAGVPAVILRRNQSQ 420
Db 361 SFVELGQVALRTSLELWMHTDPSVKNESVRNQVEDLLATLEKSGAGVPAVILRRNQSQ 420
QY 421 PLPPSSLOFLRARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPPELWLSPEEDLNFV 480
Db 421 PLPPSSLOFLRARNISGVVLADHSGAFHNKYQSIYDTAENINVSYPPELWLSPEEDLNFV 480
QY 481 TOTAKALADVATVLGRALVELAGTDFSTVQADPQTVTRLLYGLLIKANNWFQSIIRQ 540
Db 481 TOTAKALADVATVLGRALVELAGTDFSTVQADPQTVTRLLYGLLIKANNWFQSIIRQ 540
QY 541 DLRSYLGDPLOHYIAVSSFTNTTYVQVALANLTGVVNLTRFQCDPSKVPSEKNDLY 600
Db 541 DLRSYLGDPLOHYIAVSSFTNTTYVQVALANLTGVVNLTRFQCDPSKVPSEKNDLY 600
QY 601 EYSWVGPLHNETDRLPCVRSSTABRALSPAFELSQWSSTESTYTSWTSRWKDIRARI 660
Db 601 EYSWVGPLHNETDRLPCVRSSTABRALSPAFELSQWSSTESTYTSWTSRWKDIRARI 660
QY 661 FLIASKELELITLTVGFGILIFSLIVTYCINAKADVLFIAPIREPAGVSY 709
Db 661 FLIASKELELITLTVGFGILIFSLIVTYCINAKADVLFIAPIREPAGVSY 709
RESULT 14
ADA76152
ID ADA76152 standard; protein; 709 AA.
XX
AC ADA76152;
XX
XX
DT 20-NOV-2003 (first entry)
DE Human PRO polypeptide #101.
XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
KW tumour necrosis factor-alpha; TNF-alpha; chondrocyte cell; tumour;
KW cancer; adrenal; lung; colon; breast; prostate; kidney; cervix;
KW liver; microvascular endothelial cell; glucose; FFA;

KW skeletal muscle cell; adipocyte cell; pericyte cell;
KW inner ear utricular supporting cell; T-lymphocyte cell;
KW endothelial cell tube formation; bone disorder; cartilage disorder;
KW sports injury; proteoglycan; articular cartilage defect; osteoarthritis;
KW rheumatoid arthritis; haemoglobin-associated disorder thalassemia;
KW immune system cell infiltration.
XX Homo sapiens.
OS US2003073212-AL.
XX 17-APR-2003.
XX 16-APR-2002; 2002US-00123903.
XX 31-MAR-1997; 97WO-US005230.
XX 12-JUN-1998; 98WO-US012456.
XX 14-JUL-1998; 98WO-US014552.
XX 28-AUG-1998; 98WO-US017888.
XX 10-SEP-1998; 98WO-US018824.
XX 14-SEP-1998; 98WO-US019094.
XX 14-SEP-1998; 98WO-US019177.
XX 16-SEP-1998; 98WO-US019330.
XX 17-SEP-1998; 98WO-US019437.
XX 07-OCT-1998; 98WO-US021141.
XX 29-OCT-1998; 98WO-US022991.
XX 29-OCT-1998; 98WO-US022992.
XX 20-NOV-1998; 98WO-US024855.
XX 01-DEC-1998; 98WO-US025108.
XX 05-JAN-1999; 99WO-US000106.
XX 08-MAR-1999; 99WO-US005028.
XX 10-MAR-1999; 99WO-US005190.
XX 20-APR-1999; 99WO-US008615.
XX 14-MAY-1999; 99WO-US010733.
XX 02-JUN-1999; 99WO-US012252.
XX 01-SEP-1999; 99WO-US020111.
XX 08-SEP-1999; 99WO-US020594.
XX 13-SEP-1999; 99WO-US020944.
XX 15-SEP-1999; 99WO-US021090.
XX 15-SEP-1999; 99WO-US021547.
XX 05-OCT-1999; 99WO-US023089.
XX 29-NOV-1999; 99WO-US028214.
XX 30-NOV-1999; 99WO-US028313.
XX 30-NOV-1999; 99WO-US028409.
XX 01-DEC-1999; 99WO-US028301.
XX 01-DEC-1999; 99WO-US028634.
XX 02-DEC-1999; 99WO-US028551.
XX 02-DEC-1999; 99WO-US028564.
XX 02-DEC-1999; 99WO-US028565.
XX 16-DEC-1999; 99WO-US030095.
XX 20-DEC-1999; 99WO-US030911.
XX 20-DEC-1999; 99WO-US030999.
XX 22-DEC-1999; 99WO-US030720.
XX 30-DEC-1999; 99WO-US031243.
XX 30-DEC-1999; 99WO-US031274.
XX 05-JAN-2000; 2000WO-US000219.
XX 06-JAN-2000; 2000WO-US000277.
XX 11-FEB-2000; 2000WO-US00376.
XX 18-FEB-2000; 2000WO-US003565.
XX 18-FEB-2000; 2000WO-US004341.
XX 22-FEB-2000; 2000WO-US004342.
XX 24-FEB-2000; 2000WO-US004914.
XX 24-FEB-2000; 2000WO-US005004.
XX 01-MAR-2000; 2000WO-US005601.
XX 02-MAR-2000; 2000WO-US005746.
XX 02-MAR-2000; 2000WO-US005841.
XX 10-MAR-2000; 2000WO-US006319.
XX 15-MAR-2000; 2000WO-US006884.
XX 20-MAR-2000; 2000WO-US007377.
XX 21-MAR-2000; 2000WO-US007532.
XX 30-MAR-2000; 2000WO-US008439.

17-MAY-2000; 2000WO-US013705.
 22-MAY-2000; 2000WO-US014042.
 PR 30-MAY-2000; 2000WO-US014941.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 11-AUG-2000; 2000WO-US022031.
 PR 23-AUG-2000; 2000WO-US023522.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 08-NOV-2000; 2000WO-US030952.
 PR 10-NOV-2000; 2000WO-US030873.
 PR 01-DEC-2000; 2000WO-US032678.
 PR 20-DEC-2000; 2000US-00747259.
 PR 20-DEC-2000; 2000WO-US034956.
 PR 28-FEB-2001; 2001US-00796498.
 PR 28-FEB-2001; 2001WO-US006520.
 PR 01-MAR-2001; 2001WO-US006666.
 PR 09-MAR-2001; 2001US-00802706.
 PR 14-MAR-2001; 2001US-00808689.
 PR 02-APR-2001; 2001US-00816744.
 PR 05-APR-2001; 2001US-00828366.
 PR 10-MAY-2001; 2001US-00854208.
 PR 10-MAY-2001; 2001US-00854280.
 PR 18-MAY-2001; 2001US-00860216.
 PR 25-MAY-2001; 2001US-00866028.
 PR 25-MAY-2001; 2001US-00866034.
 PR 25-MAY-2001; 2001WO-US017092.
 PR 01-JUN-2001; 2001US-00872035.
 PR 01-JUN-2001; 2001WO-US017800.
 PR 05-JUN-2001; 2001US-00874503.
 PR 14-JUN-2001; 2001US-00882636.
 PR 19-JUN-2001; 2001US-00886342.
 PR 20-JUN-2001; 2001WO-US019692.
 PR 21-JUN-2001; 2001US-00887879.
 PR 22-JUN-2001; 2001WO-US020116.
 PR 29-JUN-2001; 2001WO-US021066.
 PR 09-JUL-2001; 2001WO-US021735.
 PR 18-JUL-2001; 2001US-00908827.
 PR 06-AUG-2001; 2001US-00924419.
 PR 09-AUG-2001; 2001US-00927796.
 PR 16-AUG-2001; 2001US-00931836.
 PR 19-DEC-2001; 2001US-00028072.
 XX
 PA (GETH) GENENTECH INC.
 XX
 PI Baker KP, Beresini M, Deforge L, Desnoyers L, Filvaroff E, Gao W;
 PI Gerritsen ME, Goddard A, Godowski PJ, Gurney AL, Sherwood S;
 PI Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;
 XX
 DR WPI; 2003-687639/65.
 DR N-PSDB; ADA76151.
 XX
 PT New isolated nucleic acid encoding a secreted and transmembrane
 PT polypeptide, designated e.g. PRO114 or PRO4978, useful in chromosome and
 PT gene mapping, in generating antisense RNA and DNA, and in gene therapy.
 XX
 PS Claim 12; Fig 202; 659pp; English.
 XX
 CC The invention relates to isolated human PRO polypeptides (secreted and
 CC transmembrane polypeptides) and the polynucleotides encoding them. The
 CC invention also relates to an antibody which specifically binds to a PRO
 CC polypeptide, a method for stimulating the release of tumour necrosis
 CC factor-alpha (TNF-alpha) from human blood, a method for stimulating the
 CC proliferation or differentiation of chondrocyte cells and a method for
 CC detecting the presence of a tumour in a mammal (e.g. adrenal, lung,
 CC colon, breast, prostate, rectal, kidney, cervical and liver tumours). The
 CC polynucleotides are useful in molecular biology, including uses as
 CC hybridisation probes, in chromosome and gene mapping, in generating
 CC antisense RNA and DNA and in gene therapy. The polynucleotides may also
 CC be used in preparing PRO polypeptides by recombinant techniques and in
 CC generating either transgenic animals or knock-out animals which are
 CC useful in the development and screening of therapeutically useful
 CC reagents. The PRO polypeptides or antibodies are used in preparing a
 CC medicament for treating a condition responsive to the polypeptides or

antibodies, such as tumours, for stimulating and inhibiting proliferation
 of human microvascular endothelial cells, for modulating the uptake of
 glucose or FFA by skeletal muscle cells or adipocyte cells, for
 stimulating differentiation of adipocyte cells, for stimulating
 proliferation of or gene expression in pericyte cells, for stimulating
 the proliferation of inner ear utricular supporting cells or 1-lymphocyte
 cells, for inducing endothelial cell tube formation and for treating
 various bone and/or cartilage disorders such as sports injuries and
 arthritis. PRO polypeptides which stimulate the release of proteoglycans
 from cartilage are useful for treating sports-related joint problems,
 articular cartilage defects, osteoarthritis and rheumatoid arthritis. PRO
 polypeptides are also useful for treating various mammalian haemoglobin-
 associated disorders such as various thalassemias and conditions which
 may benefit from enhanced local immune system cell infiltration. This
 sequence represents a human PRO polypeptide of the invention. Note: The
 sequence data for this patent is also available in electronic format from
 CC USPTO at seqdata.uspto.gov/sequence.html.
 XX

SQ Sequence 709 AA;

Query Match 100.0%; Score 3687; DB 6; Length 709;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MATAGGGGADPGSRGLLRLLSPCVLLAGLCRGNVERKIYIPINKTAPCVRLINATHQI 60
 DB 1 MATAGGGGADPGSRGLLRLLSPCVLLAGLCRGNVERKIYIPINKTAPCVRLINATHQI 60
 QY 61 GCSSISGDTGVHIVVEKEEDLQWLTDGNPPYMWLLESKHFTDLMELKRTSIAG 120
 DB 61 GCSSISGDTGVHIVVEKEEDLQWLTDGNPPYMWLLESKHFTDLMELKRTSIAG 120
 QY 121 LAVSLTKPSPASGFSVQCPNDGFGVYSNGYGEFAHCREIQWNSLGNLAVEDFSFI 180
 DB 121 LAVSLTKPSPASGFSVQCPNDGFGVYSNGYGEFAHCREIQWNSLGNLAVEDFSFI 180
 QY 181 FLEEDENETKVIKQCYODHNLSONGSAPTPLCAMQLFSHMAVISTATCRRSSIOSTF 240
 DB 181 FLEEDENETKVIKQCYODHNLSONGSAPTPLCAMQLFSHMAVISTATCRRSSIOSTF 240
 QY 241 SINPEIVCDPLSDYNNVMSMLKPINTTGLKPDVVVAATRLDSRSPFNVAPOAESAVA 300
 DB 241 SINPEIVCDPLSDYNNVMSMLKPINTTGLKPDVVVAATRLDSRSPFNVAPOAESAVA 300
 QY 301 SFVTQAAAALQKAPDVTTLPRNVMPVFQGETFDYIGSSRMVYDMEKGFVQLENVD 360
 DB 301 SFVTQAAAALQKAPDVTTLPRNVMPVFQGETFDYIGSSRMVYDMEKGFVQLENVD 360
 QY 361 SFVELGOVALRTSLELWMHTDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRPNQSQ 420
 DB 361 SFVELGOVALRTSLELWMHTDPVSQKNESVRNOVEDLLATLEKSGAGVPAVILRRPNQSQ 420
 QY 421 PLPSSILQRFELARNISGVVLADHSGAFHNKYYQSIYDTAENINVSYPWLSPEEDLNFV 480
 DB 421 PLPSSILQRFELARNISGVVLADHSGAFHNKYYQSIYDTAENINVSYPWLSPEEDLNFV 480
 QY 481 TDTAKALADVATVIGRALYELAGTTFSDTVQADPQTVTRLLYGLFIKANNWFQSLIRQ 540
 DB 481 TDTAKALADVATVIGRALYELAGTTFSDTVQADPQTVTRLLYGLFIKANNWFQSLIRQ 540
 QY 541 DLRSYLGDPLOHVIIVSSPTNTTVVQYALANLTCTVNNLTREOCQDPSPSEKNDLY 600
 DB 541 DLRSYLGDPLOHVIIVSSPTNTTVVQYALANLTCTVNNLTREOCQDPSPSEKNDLY 600
 QY 601 EYSWVGGLHSNETDRLPCVRSSTARLARALSPAFELSQWSSSTEYSTWTSRWDIARI 660
 DB 601 EYSWVGGLHSNETDRLPCVRSSTARLARALSPAFELSQWSSSTEYSTWTSRWDIARI 660
 QY 661 FLIASKELELITLTGVGFIILFSLIVTYCINAKADVLFIAPREPQAVSY 709
 DB 661 FLIASKELELITLTGVGFIILFSLIVTYCINAKADVLFIAPREPQAVSY 709

RESULT 15

ADA18802
ID ADA18802 standard; protein; 709 AA.

XX
AC ADA18802;

DT 20-NOV-2003 (first entry)

XX
XX Human PRO polypeptide #101.

XX Human; PRO; secreted polypeptide; transmembrane polypeptide;
XX tumour necrosis factor-alpha; TNF-alpha; blood; chondrocyte cell; lung;
XX colon; breast; prostate; rectum; cervix; liver; tumour; cancer;
XX glucose uptake; FFA; adipocyte cell; pericyte cell; proteoglycan;
XX cartilage; inner ear articular supporting cell; cytokine; A-peptide;
XX factor VIIA; endothelial cell.

XX Homo sapiens.

XX
XX US2003054517-A1.

XX
XX 20-MAR-2003.

XX
XX 08-MAY-2002; 2002US-00141755.

XX
XX 31-MAR-1997; 97WO-US005230.

XX
XX 12-JUN-1998; 98WO-US012456.

XX
XX 14-JUL-1998; 98WO-US014552.

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XX 28-AUG-1998; 98WO-US017888.

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XX 10-SEP-1998; 98WO-US018824.

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XX 14-SEP-1998; 98WO-US019093.

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XX 14-SEP-1998; 98WO-US019094.

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XX 14-SEP-1998; 98WO-US019177.

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XX 16-SEP-1998; 98WO-US019330.

XX
XX 17-SEP-1998; 98WO-US019437.

XX
XX 07-OCT-1998; 98WO-US021141.

XX
XX 29-OCT-1998; 98WO-US022992.

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XX 29-OCT-1998; 98WO-US022992.

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XX 20-NOV-1998; 98WO-US024855.

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XX 01-DEC-1998; 98WO-US025108.

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XX 05-JAN-1999; 98WO-US000106.

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XX 08-MAR-1999; 98WO-US005028.

XX
XX 10-MAR-1999; 98WO-US005190.

XX
XX 20-APR-1999; 98WO-US008615.

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XX 14-MAY-1999; 98WO-US010733.

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XX 02-JUN-1999; 98WO-US012252.

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XX 01-SEP-1999; 98WO-US020111.

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XX 08-SEP-1999; 98WO-US020594.

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XX 13-SEP-1999; 98WO-US020944.

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XX 15-SEP-1999; 98WO-US021090.

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XX 15-SEP-1999; 98WO-US021547.

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XX 05-OCT-1999; 98WO-US023089.

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XX 29-NOV-1999; 98WO-US028214.

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XX 30-NOV-1999; 98WO-US028313.

XX
XX 30-NOV-1999; 98WO-US028409.

XX
XX 01-DEC-1999; 98WO-US028301.

XX
XX 01-DEC-1999; 98WO-US028634.

XX
XX 02-DEC-1999; 98WO-US028551.

XX
XX 02-DEC-1999; 98WO-US028564.

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XX 16-DEC-1999; 98WO-US028565.

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XX 20-DEC-1999; 98WO-US030095.

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XX 20-DEC-1999; 98WO-US030911.

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XX 22-DEC-1999; 98WO-US030999.

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XX 22-DEC-1999; 98WO-US030720.

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XX 30-DEC-1999; 98WO-US031243.

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XX 30-DEC-1999; 98WO-US031274.

XX
XX 05-JAN-2000; 2000WO-US000219.

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XX 06-JAN-2000; 2000WO-US000277.

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XX 06-JAN-2000; 2000WO-US000376.

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XX 11-FEB-2000; 2000WO-US003565.

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XX 18-FEB-2000; 2000WO-US004341.

XX
XX 18-FEB-2000; 2000WO-US004342.

XX
XX 22-FEB-2000; 2000WO-US004414.

PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005746.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006584.
PR 20-MAR-2000; 2000WO-US007377.
PR 21-MAR-2000; 2000WO-US007532.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001US-00796498.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 09-MAR-2001; 2001US-00802706.
PR 14-MAR-2001; 2001US-00808689.
PR 22-MAR-2001; 2001US-00816744.
PR 05-APR-2001; 2001US-00826366.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 18-MAY-2001; 2001US-00860216.
PR 25-MAY-2001; 2001US-00866028.
PR 25-MAY-2001; 2001US-00866034.
PR 25-MAY-2001; 2001WO-US017092.
PR 01-JUN-2001; 2001US-00872035.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 14-JUN-2001; 2001US-00882636.
PR 19-JUN-2001; 2001US-00886342.
PR 20-JUN-2001; 2001WO-US019692.
PR 21-JUN-2001; 2001US-00887879.
PR 22-JUN-2001; 2001WO-US020116.
PR 23-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 06-AUG-2001; 2001US-00924419.
PR 09-AUG-2001; 2001US-00927796.
PR 16-AUG-2001; 2001US-00931836.
PR 19-DEC-2001; 2001US-00028072.

(GETH) GENENTECH INC.

Baker KP, Beresini M, DeForge L, Desnoyers L, Filvaroff E, Gao W;
Geritseen ME, Goddard A, Godowski PJ, Guney AL, Sherwood S;
Smith V, Stewart TA, Tumas D, Watanabe CK, Wood WI, Zhang Z;

WPI; 2003-521854/49.
N-PSDB; ADA18801.

New PRO nucleic acid, useful for preparing a composition for treating
e.g., tumors.

Claim 12; Fig 202; 660pp; English.

The invention relates to isolated human PRO polypeptides (secreted and
transmembrane polypeptides) and the polynucleotides encoding them. The
invention also relates to an antibody which specifically binds to a PRO
polypeptide, a method for stimulating the release of tumour necrosis
factor-alpha (TNF-alpha) from human blood, a method for stimulating the
proliferation or differentiation of chondrocyte cells and a method for
detecting the presence of a tumour in a mammal (e.g. lung, colon, breast,

CC prostate, rectal, cervical and liver tumors). The polynucleotides are
 CC useful in molecular biology, including uses as hybridisation probes, in
 CC chromosome and gene mapping, in generating antisense RNA and DNA and in
 CC gene therapy. The polynucleotides may also be used in preparing PRO
 CC polypeptides by recombinant techniques and in generating either
 CC transgenic animals or knock-out animals which are useful in the
 CC development and screening of therapeutically useful reagents. The PRO
 CC polypeptides or antibodies are used in preparing a medicament for
 CC treating a condition responsive to the polypeptides or antibodies, such
 CC as tumours, for modulating the uptake of glucose or FFA by adipocyte
 CC cells, for stimulating the proliferation of or gene expression in
 CC pericyte cells, for stimulating the release of proteoglycans from
 CC cartilage, for stimulating the proliferation of inner ear utricular
 CC supporting cells, for stimulating the release of cytokines from PBMC
 CC cells, for inhibiting the binding of A-peptide to factor VIIA, for
 CC inhibiting the differentiation of adipocyte cells and for stimulating the
 CC proliferation of endothelial cells. This sequence represents a human PRO
 CC polypeptide of the invention. Note: The sequence data for this patent is
 CC also available in electronic format from USPTO at
 CC seqdata.uspto.gov/sequence.html.
 XX
 SQ

Sequence 709 AA;

Query Match 100.0%; Score 3687; DB 6; Length 709;
 Best Local Similarity 100.0%; Pred. No. 0;
 Matches 709; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY	121	LAVSLTKPSPASGSPSQVCPNDGFGVYSNSYGPFAHCREIQWNSLGNGLAYEDFSFPI	180
Db	121	LAVSLTKPSPASGSPSQVCPNDGFGVYSNSYGPFAHCREIQWNSLGNGLAYEDFSFPI	180
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QY	241	SINPEIVCDPLSDYNVMSMLKPIINTTGLKPDORVVVAATRLDSRSPFMNVPAGAESAVA	300
Db	241	SINPEIVCDPLSDYNVMSMLKPIINTTGLKPDORVVVAATRLDSRSPFMNVPAGAESAVA	300
QY	301	SFVTQLAAAEALOKAPDVTTLPRNMFVFFQGETFDYIGSSRMVYDMKGFPPVQLENVD	360
Db	301	SFVTQLAAAEALOKAPDVTTLPRNMFVFFQGETFDYIGSSRMVYDMKGFPPVQLENVD	360
QY	361	SFVELGQVALRTSLELMWHTDPVSQKNESVRNOVEDLLATLEKSGAGVPVAILRRNQSQ	420
Db	361	SFVELGQVALRTSLELMWHTDPVSQKNESVRNOVEDLLATLEKSGAGVPVAILRRNQSQ	420
QY	421	PLPPSSIQREFLRARNISGVVLADHSGAFHNKYYQSIYDTAENINVSYPEWLSPEEDLNfV	480
Db	421	PLPPSSIQREFLRARNISGVVLADHSGAFHNKYYQSIYDTAENINVSYPEWLSPEEDLNfV	480
QY	481	TDTAKALADVATVILGRALYELAGTNFSDTVQADPQTVTRLLYGFLIKANNWFQSIILRQ	540
Db	481	TDTAKALADVATVILGRALYELAGTNFSDTVQADPQTVTRLLYGFLIKANNWFQSIILRQ	540
QY	541	DLRSYLGDGFLQHYIAVSSPTNTTYVQYALANITGVVNLTRQCODPSPKVPSENKOLY	600
Db	541	DLRSYLGDGFLQHYIAVSSPTNTTYVQYALANITGVVNLTRQCODPSPKVPSENKOLY	600
QY	601	EYSWVQGLHNSNETDRLPRCVRSTARLARALSPAFELSQWSSSTEYSTWTSRWKDIRARI	660
Db	601	EYSWVQGLHNSNETDRLPRCVRSTARLARALSPAFELSQWSSSTEYSTWTSRWKDIRARI	660
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Db 661 FLIASKELELITITVGGILIFSLIVTYCINAKADVLFIAPRBPAGVSY 709

Search completed: March 18, 2004, 12:02:52
 Job time : 57.0335 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: March 18, 2004, 12:05:19 ; Search time 38.1161 Seconds
(without alignments)
4721.731 Million cell updates/sec

Title: US-09-945-258-18

Perfect score: 3675

Sequence: 1 MEMRLNAAIWLILSYGAT.....SSRSEVLFEDLPASNAALFG 695

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1049977 seqs, 258955339 residues

Total number of hits satisfying chosen parameters: 1049977

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database :

Published Applications AA:*

- 1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
- 2: /cgn2_6/ptodata/2/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
- 4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep.*
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- 11: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep.*
- 12: /cgn2_6/ptodata/2/pubpaa/US09_NEW_PUB.pep.*
- 13: /cgn2_6/ptodata/2/pubpaa/US10A_PUBCOMB.pep.*
- 14: /cgn2_6/ptodata/2/pubpaa/US10B_PUBCOMB.pep.*
- 15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*
- 16: /cgn2_6/ptodata/2/pubpaa/US10_NEW_PUB.pep.*
- 17: /cgn2_6/ptodata/2/pubpaa/US60_NEW_PUB.pep.*
- 18: /cgn2_6/ptodata/2/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Match	Query Length	ID	Description
1	3675	100.0	695	US-09-945-258-18	Sequence 18, Appl
2	787.5	21.4	708	US-09-945-258-16	Sequence 16, Appl
3	787	21.4	690	US-09-909-567B-45	Sequence 45, Appl
4	786.5	21.4	709	US-09-945-258-14	Sequence 14, Appl
5	786.5	21.4	709	US-10-147-493-202	Sequence 202, Appl
6	786.5	21.4	709	US-10-145-127-202	Sequence 202, Appl
7	786.5	21.4	709	US-10-160-503-202	Sequence 202, Appl
8	786.5	21.4	709	US-10-143-118-202	Sequence 202, Appl
9	786.5	21.4	709	US-10-144-993-202	Sequence 202, Appl
10	786.5	21.4	709	US-10-158-787-202	Sequence 202, Appl
11	786.5	21.4	709	US-10-028-072-202	Sequence 202, Appl
12	786.5	21.4	709	US-10-121-049-202	Sequence 202, Appl
13	786.5	21.4	709	US-10-123-904-202	Sequence 202, Appl
14	786.5	21.4	709	US-10-140-470-202	Sequence 202, Appl
15	786.5	21.4	709	US-10-175-746-202	Sequence 202, Appl

16	786.5	21.4	709	14	US-10-176-918-202	Sequence 202, App
17	786.5	21.4	709	14	US-10-176-921-202	Sequence 202, App
18	786.5	21.4	709	14	US-10-137-865-202	Sequence 202, App
19	786.5	21.4	709	14	US-10-140-474-202	Sequence 202, App
20	786.5	21.4	709	14	US-10-143-431-202	Sequence 202, App
21	786.5	21.4	709	14	US-10-143-114-202	Sequence 202, App
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23	786.5	21.4	709	14	US-10-142-419-202	Sequence 202, App
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26	786.5	21.4	709	14	US-10-121-050-202	Sequence 202, App
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29	786.5	21.4	709	14	US-10-123-108-202	Sequence 202, App
30	786.5	21.4	709	14	US-10-123-236-202	Sequence 202, App
31	786.5	21.4	709	14	US-10-123-261-202	Sequence 202, App
32	786.5	21.4	709	14	US-10-140-921-202	Sequence 202, App
33	786.5	21.4	709	14	US-10-140-928-202	Sequence 202, App
34	786.5	21.4	709	14	US-10-121-045-202	Sequence 202, App
35	786.5	21.4	709	14	US-10-123-292-202	Sequence 202, App
36	786.5	21.4	709	14	US-10-123-903-202	Sequence 202, App
37	786.5	21.4	709	14	US-10-124-819-202	Sequence 202, App
38	786.5	21.4	709	14	US-10-124-822-202	Sequence 202, App
39	786.5	21.4	709	14	US-10-140-925-202	Sequence 202, App
40	786.5	21.4	709	14	US-10-160-438-202	Sequence 202, App
41	786.5	21.4	709	14	US-10-124-824-202	Sequence 202, App
42	786.5	21.4	709	14	US-10-127-825A-202	Sequence 202, App
43	786.5	21.4	709	14	US-10-127-829A-202	Sequence 202, App
44	786.5	21.4	709	14	US-10-127-835A-202	Sequence 202, App
45	786.5	21.4	709	14	US-10-127-839A-202	Sequence 202, App

ALIGNMENTS

RESULT 1

US-09-945-258-18
; Sequence 18, Application US/09945258
; Patent No. US20020058276A1
; GENERAL INFORMATION:
; APPLICANT: St.George-Hyslop, Peter H.
; APPLICANT: Fraser, Paul E.
; APPLICANT: University of Toronto
; TITLE OF INVENTION: PROTEINS RELATED TO SCHIZOPHRENIA AND USES THEREOF
; FILE REFERENCE: 1034/1H570
; CURRENT APPLICATION NUMBER: US/09/945,258
; CURRENT FILING DATE: 2001-08-31
; PRIOR APPLICATION NUMBER: US 60/229,889
; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 19
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 18
; LENGTH: 695
; TYPE: PRT
; ORGANISM: D. melanogaster
US-09-945-258-18

Query Match	100.0%;	Score 3675;	DB 9;	Length 695;
Best Local Similarity	100.0%;	Pred. No. 0;		
Matches 695;	Conservative	0;	Mismatches	0;
			Indels	0;
			Gaps	0;
QY	1	MEMRLNAAIWLILSYGATIAOQERTDKMYEPIGGASCFRRLLNGHTQTGCSSTYSGSV	60	
Db	1	MEMRLNAAIWLILSYGATIAOQERTDKMYEPIGGASCFRRLLNGHTQTGCSSTYSGSV	60	
QY	61	GVHLINVEADLEFLSSPPPPVAPMIPPHLFRNNMLRLKEAGPKNISVLLINRTNQ	120	
Db	61	GVHLINVEADLEFLSSPPPPVAPMIPPHLFRNNMLRLKEAGPKNISVLLINRTNQ	120	
QY	121	MKQFSHELNCNPNQYSGNLNSTSETCDASNPKNWPNWGTGLLHEDFPFFPIYIADLDQVTK	180	
Db	121	MKQFSHELNCNPNQYSGNLNSTSETCDASNPKNWPNWGTGLLHEDFPFFPIYIADLDQVTK	180	

181 LEKCFQDFNNHNYETHALRSICAVEVKSFMASAAVNTVCMBRTNFINNLSGSKYCDPLEG 240
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 241 RNVSPCTPESQOSETTLETVHTNEKFIIVTCRLDTTMTDPGVGLGAMDSLMGFAVETHV 300
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RESULT 2
 US-09-945-258-16
 ; Sequence 16, Application US/09945258
 ; Patent No. US20020058276A1
 ; GENERAL INFORMATION:
 ; APPLICANT: St. George-Hyslop, Peter H.
 ; APPLICANT: Fraser, Paul E.
 ; APPLICANT: University of Toronto
 ; TITLE OF INVENTION: PROTEINS RELATED TO SCHIZOPHRENIA AND USES THEREOF
 ; FILE REFERENCE: 1034/1H570
 ; CURRENT APPLICATION NUMBER: US/09/945,258
 ; CURRENT FILING DATE: 2001-08-31
 ; PRIOR APPLICATION NUMBER: US 60/229,889
 ; PRIOR FILING DATE: 2000-09-01
 ; NUMBER OF SEQ ID NOS: 19
 ; SOFTWARE: Fast-Seq for Windows Version 3.0
 ; SEQ ID NO 16
 ; LENGTH: 708
 ; TYPE: PRT
 ; ORGANISM: mouse
 ; US-09-945-258-16

Query Match 21.4%; Score 787.5; DB 9; Length 708;
 Best Local Similarity 30.6%; Pred. No. 1.5e-67;
 Matches 220; Conservative 123; Mismatches 291; Indels 85; Gaps 22;
 12 LLILSYGATIA--QGERTRDKMYEPIG-GASCFRRRLNGTHQTGCSSTYSGSVGLHLIN 67
 17 LLILSFVSLAGLGGNSVERKIYIPLNKAPCVRLNATHQICQSSISGDTGVHWE 76
 68 VEADLEFLSSPPSPYAPMIPPHLFRNNLMRLKEAGPKNISVLLINRTNMQKFSHE 127
 77 KEEDLKWLTGDNPPYVWLLGKLFTRDVMKLGKTTTSIAGLAVTLAKPNSTSFSPS 136
 128 LNCPNQVSGLNSTSETCDANPAKN-WNPWGTGLLHEDFPFPIYYIADLDQVTKLSECFQ 186

Db 137 VQCPNDGFGIYSNSYGFDEFAHCKKTLNMLGNGLAYEDFSPIPLLEDENETKVIKOCYQ 196
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 Db 197 DHNLGQNGSAPSPLCAMQLFSHMHAIVISTATCMRR-SFIQSTFSINPEIVCDPLSDYNV 255
 QY 244 SPCTPESQOSETTLETVHTNEKFIIVTCRLDTTMTDPGVGLGAMDSLMGFAVETHVAYL 303
 Db 256 WSMMLKPIN-----TSVGLPEDPVAVAAATLDSRSFPMVAPGASAVFVTLAAAEA 310
 QY 304 LKOLLPPQSKDLNHLNVLFTFNGESDYDYGSRFVYDMEKLOPFTSTGTPPIAFDNI 363
 Db 311 LHK-APDVTTLNRNVFVFGQETFDIIGSRMVMYDMENKGF-----PVLENIDSF 361
 QY 364 LDIG-----TLDDISNKLHALNGTTLAQOILRLNNYAKS-----PRYGNLNIQSEMS 413
 Db 362 VELGQVALRTSLDMLWHMTDPMQSKNESVKNOVEDLLATLEKSGAGVPEVVLRLAQSOA- 420
 QY 414 AHLPPISQSFARDPNPNALIL--NARPNKYHYSTYDDADNVDFTYANTSKDFTQLT 470
 Db 421 --LPPSLSQFLRA-RNISGVILADHSGSPHNRYIOSIYDTAENINVTYPEWQSPEDLN 477
 QY 471 EVNDFKSLNPDLSQMKVRNYSIVAMALYQITCKEYTGKVNPLMADEFLYCFLOSAD 530
 Db 478 FVTD-----TAKALANVATVLARALYELAGTTFSSIQADPQTVTRLLYGLFLVRAN 529
 QY 531 CPLFKA-----ASYGSQLTNLPNRYISVLGSGQESSGYTYRLLGYLLSQ--QPD 581
 Db 530 NSWFQSLIKHDLRSY---LDDRPLQHYIAV-----SSPTNTTVVQYALANLTGRATNL 580
 QY 582 HRDNCCTD---LP-----LHYFAGF-----NNIGECLTTONYSHALSPAFLIDGYD 624
 Db 581 TREQCQDPSKVPNESKDLYEYSWVQGFPMNSNRTERLPQCVRSTVRLARALSPAFELS--Q 638
 QY 625 WSSGMYSTWTSTWQSFARIFLRPSNVHQTTLVSIGVIVLIISFCLVYIISRSSEVFL 683
 Db 639 WSSTEVSTWASRWKDIQARIFLIASKDLEFFILVGFSTFLVSLIVTYCINAKADVLF 697

RESULT 3
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 ; Sequence 45, Application US/09909567B
 ; Publication No. US20030022257A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Macina, Roberto A.
 ; APPLICANT: Nair, Manoj
 ; APPLICANT: Chen, Seiyu
 ; TITLE OF INVENTION: Compositions and Methods Relating to Lung Specific Genes
 ; FILE REFERENCE: DEX-0214
 ; CURRENT APPLICATION NUMBER: US/09/909,567B
 ; CURRENT FILING DATE: 2001-07-20
 ; PRIOR APPLICATION NUMBER: 60/219,834
 ; PRIOR FILING DATE: 2000-07-21
 ; NUMBER OF SEQ ID NOS: 56
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO 45
 ; LENGTH: 690
 ; TYPE: PRT
 ; ORGANISM: Homo sapien
 ; US-09-909-567B-45

Query Match 21.4%; Score 787; DB 10; Length 690;
 Best Local Similarity 30.2%; Pred. No. 1.7e-67;
 Matches 216; Conservative 129; Mismatches 292; Indels 78; Gaps 20;
 11 WLILSYGATIAQGERTRDKMYEPIG-GASCFRRRLNGTHQTGCSSTYSGSVGLHLINVE 69
 1 FLTLFTFRSGLCRGNSVERKIYIPLNKAPCVRLNATHQICQSSISGDTGVHWEKE 60
 70 ADLEFLSSPPSPYAPMIPPHLFRNNLMRLKEAGPKNISVLLINRTNMQKFSHEJN 129
 61 EDLOWVLTGPNPPYVWLLGKLFTRDLMKLGKTRTSLAGLAVSLTKPSPASGSPSVQ 120

QY 130 CPNOYSGINSTSETCDASNPAAK-NWNPWGTCGLLHEDPFPPIYYIADLDQVTKLEKCFQ 188
 DB 121 CPNDGFGVYNSYGPFAHCREIQWNSLGNGLAYEDFPFIPLLEDENETKVIKQCYQDH 180
 QY 189 NNHNYETHALRSLCAVEKSPMSAAVNTVCMRRTNFN--NLGGSXYCDPLEGRNVSPP 246
 DB 181 NLSQNGSAPTFPLCAMQLFSHMAVISTATCMRRSSIQSTFSINPEIVCDPLSDYNVWSM 240
 QY 247 CTBESQOSETLTETHVNEKEFILTCTDITTFMDGVLGAMDSLMGFVTHVAYLLKQ 306
 DB 241 LKPIN-----TTGTLKPDVVAAATLDSRSFFWVAPGAESAVASVFTQLAAAEAL-Q 294
 QY 307 LLPPQSKDLHNVLFVTNGESYDYGISQRFVYDMEKLOFPTESTGTPPIAFDNIIDFMDLI 366
 DB 295 KAPDVTTLPRNVMFVFGQSTFDYIGSRMVYDMEKGF-----PVQLENVDGVEL 346
 QY 367 GTLDDISNIKL--H-----ALNGTTLAQOILRLNNYAKSPRYGFNLNI--QSEMSAHLPP 418
 DB 347 GQVALRTSLMLWHTDPVSKNESVRNQVEDLLATLEKSGA-GVPAVILRRPNQSQPLPP 405
 QY 419 TSAQSFLRDPNFNALIL---NARPNTKYYHSTYDDADNVDFYANTSKDFTOLTTEVND 475
 DB 406 SLSQRLFLRA-RNISGVVLADHSGAFHNKYYQSIYDTAENINVSYPEWLSPEEDLNFTDT 464
 QY 476 KSLNPDSLQMKVRNVSSIVAMALYQITTKGTYGTGVANPLMADEFYLCFQSDADCELF 535
 DB 465 AKALAD-----VAIVLGRALYELAGGNFTSDTVQADPQTVTRLYGLFLIKANNWSFQ 516
 QY 536 A-----ASYPGSQTNLPMRYIISVLGGSQSSGYTYRLLGLYLLSOLQ---PDIHRDNC 586
 DB 517 SILRQDLRSYLDG---PLQHYIAV-----SSPTNTYVVQYALANLTGTVVNLTRQC 567
 QY 587 TDL-----PLHYFAGFNIGECRLTTONYSHALSPAFIDGYSWSSG 628
 DB 568 QPSKVPSENKOLYYSWVQGPLH-SNETDRLPCVRSSTARLARALSPAFELS--QMSST 624
 QY 629 MYSTWTSTWQSOFARIFLRPSNVHVTLLSVGIVVLIISFCVLIYIISRSSEVLF 683
 DB 625 EYSTWTSERWKDIRAFILIASKELELITLTVGFGILIFSLIVTYCINAKADVL 679

RESULT 4

US-09-945-258-14
 ; Sequence 14, Application US/09945258
 ; Patent No. US20020058276A1
 ; GENERAL INFORMATION:
 ; APPLICANT: St. George-Hyslop, Peter H.
 ; APPLICANT: Fraser, Paul E.
 ; APPLICANT: University of Toronto
 ; TITLE OF INVENTION: PROTEINS RELATED TO SCHIZOPHRENIA AND USES THEREOF
 ; FILE REFERENCE: 1034/14570
 ; CURRENT APPLICATION NUMBER: US/09/945,258
 ; CURRENT FILING DATE: 2001-08-31
 ; PRIOR APPLICATION NUMBER: US 60/229,889
 ; PRIOR FILING DATE: 2000-09-01
 ; NUMBER OF SEQ ID NOS: 19
 ; SOFTWARE: FastSeq for Windows Version 3.0
 ; SEQ ID NO 14
 ; LENGTH: 709
 ; TYPE: PRT
 ; ORGANISM: human
 US-09-945-258-14

Query Match 21.4%; Score 786.5; DB 9; Length 709;
 Best Local Similarity 30.5%; Pred. No. 1.9e-67;

Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;

QY 12 LAILSYGATIA---QGERTRDKMYPEIG-GACFRRLNGTHQGCSSYSGSVGVHLIN 67
 DB 18 LRLLSFCVLLAGLCRNSVERKIIYIENKTPCVRLNATHQIGQSSISGDTGVHVVVE 77
 QY 68 VRADLEFLSSPPSPYAPMPPHFLTRNNLMELKEAGPKNTSVLLINRTNQMKQFSHE 127

DB 78 KESDLQWLTGDPNPPYVVLLESKHFTRLDMEKLGKRTSRIAGLAVSLTKPSPASGSPS 137
 QY 128 LNCPNQVSGLNSTSETCDASNPAAK-NWNPWGTCGLLHEDPFPPIYYIADLDQVTKLEKCFQ 186
 DB 138 VQCPNDGFGVYNSYGPFAHCREIQWNSLGNGLAYEDFPFIPLLEDENETKVIKQCYQ 197
 QY 187 DFNNHNYETHALRSLCAVEKSPMSAAVNTVCMRRTNFN--NLGGSXYCDPLEGRNVS 244
 DB 198 DHNLSQNGSAPTFPLCAMQLFSHMAVISTATCMRRSSIQSTFSINPEIVCDPLSDYNVW 257
 QY 245 PCTBESQOSETLTETHVNEKEFILTCTDITTFMDGVLGAMDSLMGFVTHVAYLL 304
 DB 258 SMUKPIN-----TTGTLKPDVVAAATLDSRSFFWVAPGAESAVASVFTQLAAAEAL 312
 QY 305 KQLLPPQSKDLHNVLFVTNGESYDYGISQRFVYDMEKLOFPTESTGTPPIAFDNIIDFMD 364
 DB 313 -QKAPDVTTLPRNVMFVFGQSTFDYIGSRMVYDMEKGF-----PVQLENVDGVEL 363
 QY 365 DIGTLDDISNIKL--H-----ALNGTTLAQOILRLNNYAKSPRYGFNLNI--QSEMSAHL 416
 DB 364 ELGQVALRTSLMLWHTDPVSKNESVRNQVEDLLATLEKSGA-GVPAVILRRPNQSQPL 422
 QY 417 PPTSAQSFLRDPNFNALIL---NARPNTKYYHSTYDDADNVDFYANTSKDFTOLTTEV 473
 DB 423 PSSLQRLFLRA-RNISGVVLADHSGAFHNKYYQSIYDTAENINVSYPEWLSPEEDLNFT 481
 QY 474 DFKSLNPDSLQMKVRNVSSIVAMALYQITTKGTYGTGVANPLMADEFYLCFQSDADCE 533
 DB 482 DTAKALAD-----VAIVLGRALYELAGGNFTSDTVQADPQTVTRLYGLFLIKANNWS 533
 QY 534 FKA-----ASYPGSQTNLPMRYIISVLGGSQSSGYTYRLLGLYLLSOLQ---PDIHRD 584
 DB 534 FOSILRQDLRSYLDG---PLQHYIAV-----SSPTNTYVVQYALANLTGTVVNLTR 584
 QY 585 NCTDL-----PLHYFAGFNIGECRLTTONYSHALSPAFIDGYSWSSG 626
 DB 585 QCQPSKVPSENKOLYYSWVQGPLH-SNETDRLPCVRSSTARLARALSPAFELS--QMS 641
 QY 627 SQMYSTWTSTWQSOFARIFLRPSNVHVTLLSVGIVVLIISFCVLIYIISRSSEVLF 683
 DB 642 STEYSTWTSERWKDIRAFILIASKELELITLTVGFGILIFSLIVTYCINAKADVL 698

RESULT 5

US-10-147-493-202
 ; Sequence 202, Application US/10147493
 ; Publication No. US20040029217A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Baker, Kevin P.
 ; APPLICANT: Beresini, Maureen
 ; APPLICANT: DeForge, Laura
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, Audrey
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Sherwood, Steven
 ; APPLICANT: Smith, Victoria
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Watanabe, Colin K
 ; APPLICANT: Wood, William
 ; APPLICANT: Zhang, Zemin
 ; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
 ; FILE REFERENCE: P3330RIC345
 ; CURRENT APPLICATION NUMBER: US/10/147,493
 ; CURRENT FILING DATE: 2002-05-17
 ; Prior Application removed - See File Wrapper or Palm
 ; NUMBER OF SEQ ID NOS: 550
 ; SEQ ID NO 202

```

; LENGTH: 709
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-147-493-202

Query Match      21.4%; Score 786.5; DB 12; Length 709;
Best Local Similarity 30.5%; Pred. No. 1.9e-67;
Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;

QY 12 LLILSYGATIA---QGERTRDKMYPEIG-GASCPRRLNGTHQTCCSSTYSVGVHLHLN 67
Db 18 LRLLSFCVLLAGLCRGSVERKIYIPLNKAPTAPCVRLLNATHQIGCQSSISGDTGVHVE 77
QY 68 VEADLEFLLSPPSPYPAPMIPPHLFTNNMLRLKEAGPKNISVLLINRNQMKQFSHE 127
Db 78 KEEDLOWLTDGPNPPYVWLESKGFTRDLMEKLGRTSRIAGLAVASVFTQLAAEAL 312
QY 128 LNCNQVSGLNSTSTCDANPAK--NNPMTGTLHEDFPPIYYIADLDQVTKLEKCFQ 186
Db 138 VQCPNDGFGVYSNSYGEFAHCREIQWNSLGNGLAYEDFSFPIFLEDENETKVIKQCY 197
QY 187 DFNHNYETHALRSICAVEVKSFAAVENTECMRRTNFN--NLGGSKYCDPLEGRNVS 244
Db 198 DHNLQSGSAPTFPLCAMQLFSHMAVISTATCMRRSSIQSTFSINPEIVCDPLSDYNVW 257
QY 245 PPTPESQOSETTLETVHTNEKFIPLVTCRLDTTTFMGVGLGAMDLSMGFAVFTHVAYLL 304
Db 258 SMLKPIN-----TTGTLKPDVVVAATLDSRFFWNVAPGASAVASVFTQLAAEAL 312
QY 305 KQLLPQSKDLHNLVFTFNGESYDIYIGSORFYVDMKLOFPTTESTGTPPIAFDNIDFML 364
Db 313 -QKAPDVTTLPNNVMEVFFQGETFDYIGSSRMVYDMEKGF-----PVQLENVDSFV 363
QY 365 DIGTLDDISNKL--H-----ALNGTTLAQOILERNLNNYAKSPRYGFNLNI--QSEMSAHL 416
Db 364 ELGQVALRTSLMLWHTDPSQKNSVRNQVEDLLATLEKSGA-GVPAVILRRPNQOPL 422
QY 417 PPTSAQSFLLRDPNFNALIL---NARPTNKYHSTYDDADNVDFTYANTSKDFTQLTEVN 473
Db 423 PPSSLRQFLRA--RNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFTV 481
QY 474 DFKSLNPDLSQMKVRNVSSIVAMALYQITCKEYTGTKVANPLMADEFLYCFLOSADCP 533
Db 482 DTAKALAD-----VATVLGRALYELAGGTNFSDTVQADPQVTVRLLYGFLIKANNWS 533
QY 534 FKA-----ASYPGSQLTNLPPMYIISVLGGSQSSGYTVRLLYGILLSOLO---PDHHRD 584
Db 534 FQSLRQDLRSYLGDG---PLQHYIAV-----SSPTNTTVVQYALANLTGTVNLNLTRE 584
QY 585 NCTDL-----PLHYFAGFNNGICECRLTTONYSHALSPAFLLIDGVDWS 626
Db 585 QCQDPSKVPSENKDLVEYSWVQGPLH--SNETDRLPCRVSTARLARALSPAFELS--QWS 641
QY 627 SGMYSTWTESTWQSFARIPLRPNVHQVTTLSVGIWVLIISFCVLIYIISRSRVL 683
Db 642 STEYSTWTESTRWKDIRARIFLIASKELELITLVGFGILIFSLIVTYCINAKADVLF 698

RESULT 6
US-10-145-127-202
; Sequence 202, Application US/10145127
; Publication No. US2004003558A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.

```

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; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C252
; CURRENT APPLICATION NUMBER: US/10/145,127
; CURRENT FILING DATE: 2002-05-13
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 202
; LENGTH: 709
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-145-127-202

```

```

Query Match      21.4%; Score 786.5; DB 12; Length 709;
Best Local Similarity 30.5%; Pred. No. 1.9e-67;
Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;

QY 12 LLILSYGATIA---QGERTRDKMYPEIG-GASCPRRLNGTHQTCCSSTYSVGVHLHLN 67
Db 18 LRLLSFCVLLAGLCRGSVERKIYIPLNKAPTAPCVRLLNATHQIGCQSSISGDTGVHVE 77
QY 68 VEADLEFLLSPPSPYPAPMIPPHLFTNNMLRLKEAGPKNISVLLINRNQMKQFSHE 127
Db 78 KEEDLOWLTDGPNPPYVWLESKGFTRDLMEKLGRTSRIAGLAVASVFTQLAAEAL 312
QY 128 LNCNQVSGLNSTSTCDANPAK--NNPMTGTLHEDFPPIYYIADLDQVTKLEKCFQ 186
Db 138 VQCPNDGFGVYSNSYGEFAHCREIQWNSLGNGLAYEDFSFPIFLEDENETKVIKQCY 197
QY 187 DFNHNYETHALRSICAVEVKSFAAVENTECMRRTNFN--NLGGSKYCDPLEGRNVS 244
Db 198 DHNLQSGSAPTFPLCAMQLFSHMAVISTATCMRRSSIQSTFSINPEIVCDPLSDYNVW 257
QY 245 PPTPESQOSETTLETVHTNEKFIPLVTCRLDTTTFMGVGLGAMDLSMGFAVFTHVAYLL 304
Db 258 SMLKPIN-----TTGTLKPDVVVAATLDSRFFWNVAPGASAVASVFTQLAAEAL 312
QY 305 KQLLPQSKDLHNLVFTFNGESYDIYIGSORFYVDMKLOFPTTESTGTPPIAFDNIDFML 364
Db 313 -QKAPDVTTLPNNVMEVFFQGETFDYIGSSRMVYDMEKGF-----PVQLENVDSFV 363
QY 365 DIGTLDDISNKL--H-----ALNGTTLAQOILERNLNNYAKSPRYGFNLNI--QSEMSAHL 416
Db 364 ELGQVALRTSLMLWHTDPSQKNSVRNQVEDLLATLEKSGA-GVPAVILRRPNQOPL 422
QY 417 PPTSAQSFLLRDPNFNALIL---NARPTNKYHSTYDDADNVDFTYANTSKDFTQLTEVN 473
Db 423 PPSSLRQFLRA--RNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFTV 481
QY 474 DFKSLNPDLSQMKVRNVSSIVAMALYQITCKEYTGTKVANPLMADEFLYCFLOSADCP 533
Db 482 DTAKALAD-----VATVLGRALYELAGGTNFSDTVQADPQVTVRLLYGFLIKANNWS 533
QY 534 FKA-----ASYPGSQLTNLPPMYIISVLGGSQSSGYTVRLLYGILLSOLO---PDHHRD 584
Db 534 FQSLRQDLRSYLGDG---PLQHYIAV-----SSPTNTTVVQYALANLTGTVNLNLTRE 584
QY 585 NCTDL-----PLHYFAGFNNGICECRLTTONYSHALSPAFLLIDGVDWS 626
Db 585 QCQDPSKVPSENKDLVEYSWVQGPLH--SNETDRLPCRVSTARLARALSPAFELS--QWS 641
QY 627 SGMYSTWTESTWQSFARIPLRPNVHQVTTLSVGIWVLIISFCVLIYIISRSRVL 683
Db 642 STEYSTWTESTRWKDIRARIFLIASKELELITLVGFGILIFSLIVTYCINAKADVLF 698

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RESULT 7

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US-10-160-503-202
; Sequence 202, Application US/10160503
; Publication No. US20040033559A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: ACIDS ENCODING THE SAME
; CURRENT APPLICATION NUMBER: US/10/160,503
; CURRENT FILING DATE: 2002-05-30
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 202
; LENGTH: 709
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-160-503-202

Query Match      21.4%; Score 786.5; DB 12; Length 709;
Best Local Similarity 30.5%; Pred. No. 1.9e-67;
Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;

QY 12 LLILSYGATIA---QGERTRDKMYEPIG-GASCFRLNGTHQGCSTYSGSVGLHLIN 67
Db 18 LRLLSFCVLLAGCRGNSVERKIYIPLNKTAPCVRLNATHQIGCOSSISGDTGVHVVE 77
QY 68 VEADLEFLSSPPSPPPYAPMIPHLFTRNNLMRLKEAGPKNISVLLINRTNQMKQFSHE 127
Db 78 KEEDLQWLTDGPNPPYVLLSKHFTDRDMEKLGKRTSRIAGLAVSLTKPSPASGSPS 137
QY 128 LNCNPQYSGLNSTSETCDASNPAP-KNNPWGTGLLHEDFPPIYYIADLDQVTKLEKCFQ 186
Db 138 VQCPNDGFGVYNSGYGPEFAHCREIQWNSLGNLAYEDFSFPIFLEDENETKVIKQCYQ 197
QY 187 DENNHVETHALRSLSLCAVEKSPMSAAVNTVEVCMRTNFIN--NLGSKYCDPLEGRNVS 244
Db 198 DHNLSQNGSAPTPPLCAMQLFSSHAVISTATCMRRSSIQTSTFSINPEIVCDPLSDYNW 257
QY 245 PPTPESQOSETTLETVHTNEKFIPLVTCRLDITTFMEDVGLGAMDSLGMGFAVETHVAYLL 304
Db 258 SMLKPIN-----TTGTLKPDVVVAATRLDSRSFFNVAPGASAVASFTVQLAAEAL 312
QY 305 KQLLPQSKDLHNLVFTVNGESYDIYSQRFVYDMKLOFPFESTGTPPIAFDNIIDFML 364
Db 313 -QKAPDVTTLPFRNVMFVFOGETFDYIGSRMVYDMKGF-----PVQLENVDSFV 363
QY 365 DIGTLDISNKL--H-----ALNGTTLAAQILRELNNYAKSPRYGNLNI--QSESAHL 416
Db 364 ELQOVALRTSLKWMHTDPVQKNESVRNQVDELLATLEKSGA-GVPAVILRPNQSQPL 422
QY 417 PPTSAQSLRRDPNFNALIL---NARPTNKYHSTYDDADNVDFTVANTSKDFTQTEVN 473
Db 423 PPSSLQRFLLA-RNISGVVLADSHGAFHKNKYQSIYDTAENINVSPEWLSPEDLNFTV 481
QY 474 DFKSLNPDSLQMKVRNVSSIVAMALYQITIGKYGTGKVANPLMADDEFYCFIQSADCP 533
Db 482 DTAKALAD-----VATVLGRALVELAGGTNFSDTVQADPQTVTRLLYGLFIKANN 533

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RESULT 8

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US-10-143-118-202
; Sequence 202, Application US/10143118
; Publication No. US20040038335A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: ACIDS ENCODING THE SAME
; CURRENT APPLICATION NUMBER: US/10/143,118
; CURRENT FILING DATE: 2002-05-09
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 202
; LENGTH: 709
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-143-118-202

Query Match      21.4%; Score 786.5; DB 12; Length 709;
Best Local Similarity 30.5%; Pred. No. 1.9e-67;
Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;

QY 12 LLILSYGATIA---QGERTRDKMYEPIG-GASCFRLNGTHQGCSTYSGSVGLHLIN 67
Db 18 LRLLSFCVLLAGCRGNSVERKIYIPLNKTAPCVRLNATHQIGCOSSISGDTGVHVVE 77
QY 68 VEADLEFLSSPPSPPPYAPMIPHLFTRNNLMRLKEAGPKNISVLLINRTNQMKQFSHE 127
Db 78 KEEDLQWLTDGPNPPYVLLSKHFTDRDMEKLGKRTSRIAGLAVSLTKPSPASGSPS 137
QY 128 LNCNPQYSGLNSTSETCDASNPAP-KNNPWGTGLLHEDFPPIYYIADLDQVTKLEKCFQ 186
Db 138 VQCPNDGFGVYNSGYGPEFAHCREIQWNSLGNLAYEDFSFPIFLEDENETKVIKQCYQ 197
QY 187 DENNHVETHALRSLSLCAVEKSPMSAAVNTVEVCMRTNFIN--NLGSKYCDPLEGRNVS 244
Db 198 DHNLSQNGSAPTPPLCAMQLFSSHAVISTATCMRRSSIQTSTFSINPEIVCDPLSDYNW 257
QY 245 PPTPESQOSETTLETVHTNEKFIPLVTCRLDITTFMEDVGLGAMDSLGMGFAVETHVAYLL 304
Db 258 SMLKPIN-----TTGTLKPDVVVAATRLDSRSFFNVAPGASAVASFTVQLAAEAL 312

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QY 305 KQLLPPOSQDLHNVLFVTFNGESYDYGSRFVDMKLPPTSTGTPPIAFDNIDFML 364
Db 313 -QKAPDVTTLPNNVVFVFFQGETFDYIGSSRMVYDMEKGF-----PVQLENDVSFV 363
QY 365 DIGTLDISNKL--H-----ALNGTTTAAQQLRLNNYAKSPRYGENLNI--QSEMSAHL 416
Db 364 ELGQVALRTSLELWHTDPVSKNESVRNQVEDLALTEKSGA-GVPAVILRRNQSOPL 422
QY 417 PPTSAQSLRRDPNFNALIL---NARPTNKYHYHYDDADNVDFTYANTSKDFTQLTENV 473
Db 423 PPSLQRFLLA-RNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFTV 481
QY 474 DFKSLNPDSLQMKVRNYSIVAMALYQITCKEYTGKIVANPLMADEFLYCFLOSADCP 533
Db 482 DTAKALAD-----VATVIGRALYELAGTNSFDTVQADPQTVTRLLYGLFKANNWS 533
QY 534 FKA-----ASYPGSQTNLNPPMYISVLGGSQSSGYTYRLLGYLLSQO---PDHHRD 584
Db 534 FQSILRQDLRSYLDG---PLQHYIAV-----SPTNTTYVQYALANLTGTVNLTRE 584
QY 585 NCTDL-----PLHYFAGFNNGECRLTTQNYSHALSPAFLIDGYDWS 626
Db 585 QCQDPSKVPSENKDLYEYSWVQGPLH-SNETDRLPRCVRSTARLARALSPAFELS--QWS 641
QY 627 SGMYSTWTESTWSQFSARIFLRPSNVHQVTLSVGIIVLIISFCLVYIISRSSEVLF 683
Db 642 STEYSTWTESTRWKDIRARIFLIAKSELELITLVGFGILIFSLLIVTYCINAKADVLF 698

RESULT 9
US-10-144-993-202
; Sequence 202, Application US/10144993
; Publication No. US20040038336A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE OF INVENTION: ACIDS ENCODING THE SAME
; CURRENT APPLICATION NUMBER: US/10/144,993
; CURRENT FILING DATE: 2002-05-13
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 202
; LENGTH: 709
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-144-993-202

Query Match 21.4%; Score 786.5; DB 12; Length 709;
Best Local Similarity 30.5%; Pred. No. 1.9e-67;
Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;

QY 12 LLLISVGATIA--QGERTRDKWEPIG-GASCERLNGTHOTCCSTYSGSVGLHLIN 67
Db 18 LRLLSFVLLIAGLCRGSVERKIYIPLNKTAAPCVRLNLNATHQICQSSISGDTGVHVE 77
QY 68 VEADLEFLSSPPSPYPAPMIPPHLFRNNMLRLKEAGPKNISVVLINRNTQMKQSHE 127

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Db 78 KEEDLQVLTDGNNPPYVWVLLSKHFTRLDMELKLGRTSRIAGLAVSLTKPSPASGSPS 137
QY 128 LNCPCNVYSLNLSSETCDASNPAK-WNNPMGTGLLHEDRPPIYYIADLDQVTKLEKCFQ 186
Db 138 VQCPNDGFGVYSNGPEFAHCREIOWNSLGNGLAYEDFPFLLEDENETKVIKOCYQ 197
QY 187 DFNNHYETHALRSCLCAVEVKSFMSAAVTEVCMRRKTNFN--NLGSKYKCDPLEGRNVS 244
Db 198 DHNLSQNGSAPTFLPCAMQLFSMHAVISTATCMRRSSIQSTFSINPEIVCDPLSDYNVW 257
QY 245 PPTPSQSQSEITLSTVHTNEKFLITCTRLDTTMDGVLGMDSLMGFAVTHAYLL 304
Db 258 SMLKPIN-----TTGLTKPDVVVAAATRLDSRFFNNVAPGAESAASVFTQLAAEAL 312
QY 305 KQLLPPOSQDLHNVLFVTFNGESYDYGSRFVDMKLPPTSTGTPPIAFDNIDFML 364
Db 313 -QKAPDVTTLPNNVVFVFFQGETFDYIGSSRMVYDMEKGF-----PVQLENDVSFV 363
QY 365 DIGTLDISNKL--H-----ALNGTTTAAQQLRLNNYAKSPRYGENLNI--QSEMSAHL 416
Db 364 ELGQVALRTSLELWHTDPVSKNESVRNQVEDLALTEKSGA-GVPAVILRRNQSOPL 422
QY 417 PPTSAQSLRRDPNFNALIL---NARPTNKYHYHYDDADNVDFTYANTSKDFTQLTENV 473
Db 423 PPSLQRFLLA-RNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFTV 481
QY 474 DFKSLNPDSLQMKVRNYSIVAMALYQITCKEYTGKIVANPLMADEFLYCFLOSADCP 533
Db 482 DTAKALAD-----VATVIGRALYELAGTNSFDTVQADPQTVTRLLYGLFKANNWS 533
QY 534 FKA-----ASYPGSQTNLNPPMYISVLGGSQSSGYTYRLLGYLLSQO---PDHHRD 584
Db 534 FQSILRQDLRSYLDG---PLQHYIAV-----SPTNTTYVQYALANLTGTVNLTRE 584
QY 585 NCTDL-----PLHYFAGFNNGECRLTTQNYSHALSPAFLIDGYDWS 626
Db 585 QCQDPSKVPSENKDLYEYSWVQGPLH-SNETDRLPRCVRSTARLARALSPAFELS--QWS 641
QY 627 SGMYSTWTESTWSQFSARIFLRPSNVHQVTLSVGIIVLIISFCLVYIISRSSEVLF 683
Db 642 STEYSTWTESTRWKDIRARIFLIAKSELELITLVGFGILIFSLLIVTYCINAKADVLF 698

RESULT 10
US-10-158-787-202
; Sequence 202, Application US/10158787
; Publication No. US20040039164A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C449
; CURRENT APPLICATION NUMBER: US/10/158,787
; CURRENT FILING DATE: 2003-04-03
; PRIOR APPLICATION NUMBER: 60/049911
; PRIOR FILING DATE: 1997-06-18

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;; PRIOR APPLICATION NUMBER: 60/056974
;; PRIOR FILING DATE: 1997-08-26
;; PRIOR APPLICATION NUMBER: 60/059113
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059115
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059117
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059122
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059184
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059263
;; PRIOR FILING DATE: 1997-09-18
;; PRIOR APPLICATION NUMBER: 60/059352
;; PRIOR FILING DATE: 1997-09-19
;; PRIOR APPLICATION NUMBER: 60/059588
;; PRIOR FILING DATE: 1997-09-19
;; Remaining Prior Application data removed - See File Wrapper or PALM.
;; NUMBER OF SEQ ID NOS: 350
;; SEQ ID NO 202
;; LENGTH: 709
;; TYPE: PRT
;; ORGANISM: Homo Sapien
US-10-158-787-202

Query Match 21.4%; Score 786.5; DB 12; Length 709;
Best Local Similarity 30.5%; Pred. No. 1.9e-67;
Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;
QY 12 LLILSVGATIA--QGERTRDQWYEPDG-GASCFRRLNGTHQTCSTYSGSVGVHLIN 67
Db 18 LRLLEFCVLGLCRGNSVERKIYIPLNKTAPCVRLNATHQICGSSISGDTGVHVE 77
QY 68 VEADELEFLSSPPSPYAPMIPPHIFTRNNMLRLEKAGPKNISVLLINRNTQMOKFSHE 127
Db 78 KEEDLQWLITDGNPNPYMLLESKHETDLMELKORTSRIAGLAVSLTKPSPASGFSFS 137
QY 128 LNCNPQYSLNSETCTDASNAK-NWNPWTGGLLHEDPPPIYYIADLDQVTKLEKCFQ 186
Db 138 VQCPNDGFGVYNSYGPFAHCREIQWNSLGNGLAYEDFSFIFLLEDENETKVKIQCYQ 197
QY 187 DENNNHYETHALRSICAVEYFMSAAVTEVCMBRTNIN--NLGSKYKCPLEGKRVUS 244
Db 198 DNLNLSQNGAPTPPCAMQLFSGHMAVISTATCMRRSSIQSTFSINPEIVCDPLSDYNVW 257
QY 245 PCTPESQOSETTLETVHTNEKFIIVTCRLDTTFMGVGLGAMDSLMGFVFTHVAYLL 304
Db 258 SMLKPIN---TTGLKPDVVVAAATLDSRSPFNVPAGASAVASFVTLAAAEAL 312
QY 305 KOLLPPQSKDLHNLVFTNGESYDYGQRFVYDMEKLOFTTESTGTPPIAFDNIEMFL 364
Db 313 -QKAPDVTPLPRNVMPVFPQGETFDYIGSSRVYDMEKGF-----PVQLENVDVSFV 363
QY 365 DIGTLLDDISNKL--H---ALNGTTLAQILRLNNYAKSPRYGHNLI--QSEMSAHL 416
Db 364 ELGVALRTSLBLWMTDPVQKNSVRNQVEDLIALLEKSGA-GUPAVILRRPNQSQPL 422
QY 417 PPTSQSFLLRDPNPNALIL---NARPTNKYHYSTYDDADNDVDFYANTSKDFTQTEYN 473
Db 423 PPSLSQRLFLRA-RNISGVVLADHSGAFHNKYQSIYDTAENINVSPEWLSPEEDLNFTV 481
QY 474 DFKSLNPDSLQMKVRNVSSIVAMALYQTTTGKYGTKGVANPLMADEFLYCFLOQADCLP 533
Db 482 DTAKALAD-----VATVGLRALVELAGGTNFSDTQADPQTVTRLLYGLFLIKANNSW 533
QY 534 EKA-----ASYEGSQLTNLPPMRYISVLGQSSSGYTYRLLGYLLSOLQ---PDIHRD 584
Db 534 FQSLIRQDRLSYLDG-----PLQHYIAV-----SSPTNTYVQVALANLTGTVNLTR 584
QY 585 NCTDL-----PLHYFAGFNNGICERLTTQNYSHALSPAFILIDGYDWS 626
Db 585 QCQDPKVPSENKOLYEYSWVQGPLH-SNETDRLPCVSTARLARALSPAFELS--QWS 641

QY 627 SQMYSTWTESTWSQFSARIFLRPSNVHQVTTLSVGIVLIIISFCLVYIISRSSEVLP 683
Db 642 STEYSTWTESTRWKDIRAFIRIFLIASKELELITLTVGFGILIFSLIVTYCINAKADVLP 698

RESULT 11

US-10-028-072-202
;; Sequence 202, Application US/10028072
;; Publication No. US20030004311A1
;; GENERAL INFORMATION:
;; APPLICANT: Baker, Kevin P.
;; APPLICANT: Beresini, Maureen
;; APPLICANT: DeForge, Laura
;; APPLICANT: Desnoyers, Luc
;; APPLICANT: Filvaroff, Ellen
;; APPLICANT: Gao, Wei-Qiang
;; APPLICANT: Gerritsen, Mary E.
;; APPLICANT: Goddard, Audrey
;; APPLICANT: Godowski, Paul J.
;; APPLICANT: Gurney, Austin L.
;; APPLICANT: Sherwood, Steven
;; APPLICANT: Smith, Victoria
;; APPLICANT: Stewart, Timothy A.
;; APPLICANT: Tumas, Daniel
;; APPLICANT: Watanabe, Colin K
;; APPLICANT: Wood, William
;; APPLICANT: Zhang
;; TITLE OF INVENTION:
;; FILE REFERENCE:
;; CURRENT APPLICATION NUMBER: US/10/028,072
;; CURRENT FILING DATE: 2001-12-19
;; PRIOR APPLICATION NUMBER: 60/049911
;; PRIOR FILING DATE: 1997-06-18
;; PRIOR APPLICATION NUMBER: 60/056974
;; PRIOR FILING DATE: 1997-08-26
;; PRIOR APPLICATION NUMBER: 60/059113
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059115
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059117
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059122
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059184
;; PRIOR FILING DATE: 1997-09-17
;; PRIOR APPLICATION NUMBER: 60/059263
;; PRIOR FILING DATE: 1997-09-18
;; PRIOR APPLICATION NUMBER: 60/059352
;; PRIOR FILING DATE: 1997-09-19
;; PRIOR APPLICATION NUMBER: 60/059588
;; PRIOR FILING DATE: 1997-09-19
;; PRIOR APPLICATION NUMBER: 60/059836
;; PRIOR FILING DATE: 1997-09-24
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;; PRIOR FILING DATE: 1997-10-17
;; PRIOR APPLICATION NUMBER: 60/062285
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;; PRIOR FILING DATE: 1997-10-17
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;; PRIOR APPLICATION NUMBER: 60/063045
;; PRIOR FILING DATE: 1997-10-24
;; PRIOR APPLICATION NUMBER: 60/063082
;; PRIOR FILING DATE: 1997-10-31
;; PRIOR APPLICATION NUMBER: 60/063127
;; PRIOR FILING DATE: 1997-10-24
;; PRIOR APPLICATION NUMBER: 60/063327
;; PRIOR FILING DATE: 1997-10-27
;; PRIOR APPLICATION NUMBER: 60/063329

1	PRIOR FILING DATE: 1997-10-27	
2	PRIOR APPLICATION NUMBER: 60/063550	
3	PRIOR FILING DATE: 1997-10-28	
4	PRIOR APPLICATION NUMBER: 60/063561	
5	PRIOR FILING DATE: 1997-10-28	
6	PRIOR APPLICATION NUMBER: 60/063704	
7	PRIOR FILING DATE: 1997-10-29	
8	PRIOR APPLICATION NUMBER: 60/063733	
9	PRIOR FILING DATE: 1997-10-29	
10	PRIOR APPLICATION NUMBER: 60/063735	
11	PRIOR FILING DATE: 1997-10-29	
12	PRIOR APPLICATION NUMBER: 60/063738	
13	PRIOR FILING DATE: 1997-10-29	
14	PRIOR APPLICATION NUMBER: 60/063755	
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16	PRIOR APPLICATION NUMBER: 60/064248	
17	PRIOR FILING DATE: 1997-11-03	
18	PRIOR APPLICATION NUMBER: 60/064809	
19	PRIOR FILING DATE: 1997-11-07	
20	PRIOR APPLICATION NUMBER: 60/065186	
21	PRIOR FILING DATE: 1997-11-12	
22	PRIOR APPLICATION NUMBER: 60/065846	
23	PRIOR FILING DATE: 1997-11-17	
24	PRIOR APPLICATION NUMBER: 60/066364	
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30	PRIOR APPLICATION NUMBER: 60/066770	
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32	PRIOR APPLICATION NUMBER: 60/069212	
33	PRIOR FILING DATE: 1997-12-11	
34	PRIOR APPLICATION NUMBER: 60/069278	
35	PRIOR FILING DATE: 1997-12-11	
36	PRIOR APPLICATION NUMBER: 60/069334	
37	PRIOR FILING DATE: 1997-12-11	
38	PRIOR APPLICATION NUMBER: 60/069694	
39	PRIOR FILING DATE: 1997-12-16	
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41	PRIOR FILING DATE: 1998-01-23	
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43	PRIOR FILING DATE: 1998-02-04	
44	PRIOR APPLICATION NUMBER: 60/074086	
45	PRIOR FILING DATE: 1998-02-09	
46	PRIOR APPLICATION NUMBER: 60/074092	
47	PRIOR FILING DATE: 1998-02-09	
48	PRIOR APPLICATION NUMBER: 60/077791	
49	PRIOR FILING DATE: 1998-03-12	
50	PRIOR APPLICATION NUMBER: 60/078910	
51	PRIOR FILING DATE: 1998-03-20	
52	PRIOR APPLICATION NUMBER: 60/079294	
53	PRIOR FILING DATE: 1998-03-25	
54	PRIOR APPLICATION NUMBER: 60/079663	
55	PRIOR FILING DATE: 1998-02-27	
56	PRIOR APPLICATION NUMBER: 60/079728	
57	PRIOR FILING DATE: 1998-03-27	
58	PRIOR APPLICATION NUMBER: 60/080165	
59	PRIOR FILING DATE: 1998-03-31	
60	PRIOR APPLICATION NUMBER: 60/081203	
61	PRIOR FILING DATE: 1998-04-09	
62	PRIOR APPLICATION NUMBER: 60/081229	
63	PRIOR FILING DATE: 1998-04-09	
64	PRIOR APPLICATION NUMBER: 60/081695	
65	PRIOR FILING DATE: 1998-04-14	
66	PRIOR APPLICATION NUMBER: 60/081817	
67	PRIOR FILING DATE: 1998-04-15	
68	PRIOR APPLICATION NUMBER: 60/081818	
69	PRIOR FILING DATE: 1998-04-15	
70	PRIOR APPLICATION NUMBER: 60/082999	
71	PRIOR FILING DATE: 1998-04-24	
72	PRIOR APPLICATION NUMBER: 60/083322	
73	PRIOR FILING DATE: 1998-04-25	

1	PRIOR APPLICATION NUMBER: 60/083541
2	PRIOR FILING DATE: 1998-04-29
3	PRIOR APPLICATION NUMBER: 60/084600
4	PRIOR FILING DATE: 1998-05-07
5	PRIOR APPLICATION NUMBER: 60/084627
6	PRIOR FILING DATE: 1998-05-07
7	PRIOR APPLICATION NUMBER: 60/084637
8	PRIOR FILING DATE: 1998-05-07
9	PRIOR APPLICATION NUMBER: 60/085149
10	PRIOR FILING DATE: 1998-05-12
11	PRIOR APPLICATION NUMBER: 60/085323
12	PRIOR FILING DATE: 1998-05-13
13	PRIOR APPLICATION NUMBER: 60/085338
14	PRIOR FILING DATE: 1998-05-13
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16	PRIOR FILING DATE: 1998-05-13
17	PRIOR APPLICATION NUMBER: 60/085579
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20	PRIOR FILING DATE: 1998-05-15
21	PRIOR APPLICATION NUMBER: 60/085704
22	PRIOR FILING DATE: 1998-05-15
23	PRIOR APPLICATION NUMBER: 60/086414
24	PRIOR FILING DATE: 1998-05-22
25	PRIOR APPLICATION NUMBER: 60/086430
26	PRIOR FILING DATE: 1998-05-22
27	PRIOR APPLICATION NUMBER: 60/087106
28	PRIOR FILING DATE: 1998-05-28
29	PRIOR APPLICATION NUMBER: 60/088026
30	PRIOR FILING DATE: 1998-06-04
31	PRIOR APPLICATION NUMBER: 60/088730
32	PRIOR FILING DATE: 1998-06-10
33	PRIOR APPLICATION NUMBER: 60/088741
34	PRIOR FILING DATE: 1998-06-10
35	PRIOR APPLICATION NUMBER: 60/088810
36	PRIOR FILING DATE: 1998-06-10
37	PRIOR APPLICATION NUMBER: 60/088858
38	PRIOR FILING DATE: 19/98-06-11
39	PRIOR APPLICATION NUMBER: 60/089532
40	PRIOR FILING DATE: 1998-06-17
41	PRIOR APPLICATION NUMBER: 60/089599
42	PRIOR FILING DATE: 1998-06-17
43	PRIOR APPLICATION NUMBER: 60/089907
44	PRIOR FILING DATE: 1998-06-18
45	PRIOR APPLICATION NUMBER: 60/089947
46	PRIOR FILING DATE: 1998-06-19
47	PRIOR APPLICATION NUMBER: 60/090349
48	PRIOR FILING DATE: 1998-06-23
49	PRIOR APPLICATION NUMBER: 60/090429
50	PRIOR FILING DATE: 1998-06-24
51	PRIOR APPLICATION NUMBER: 60/090445
52	PRIOR FILING DATE: 1998-06-24
53	PRIOR APPLICATION NUMBER: 60/090538
54	PRIOR FILING DATE: 1998-06-24
55	PRIOR APPLICATION NUMBER: 60/090863
56	PRIOR FILING DATE: 1998-06-26
57	PRIOR APPLICATION NUMBER: 60/091360
58	PRIOR FILING DATE: 1998-07-01
59	PRIOR APPLICATION NUMBER: 60/091519
60	PRIOR FILING DATE: 1998-07-02
61	PRIOR APPLICATION NUMBER: 60/091982
62	PRIOR FILING DATE: 1998-07-07

Query Match 21.4%; Score 786.5; DB 14; Length 709;
Best Local Similarity 30.5%; Pred. No. 1.9e-67;
Matches 219; Conservative 127; Mismatches 290; Indels 81;

[illegible]

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Db 78 KEEDLQWLVDGPNPPVWVLLSKHFTDRDLMEKLGKTSRIAGLAVSLTKPSPASGSPS 137
QY 128 LNCNPQVSGLNSGTCDSANPAK-NWNPWGTLGHHEDFPPIYIADLDQVTKLEKCFQ 186
Db 138 VQCPNDGFGVYNSYGEFAHCRKREIOWNSLGNGLAYEDFPFIFFLEDENETKVIKQCYQ 197
QY 187 DENHNHETHALRSLCAVEKSFMSAAVTEVCMRTNFIN--NLGSKYCDPLEGRNVS 244
Db 198 DHNLSQNGSAPTPCLCAMQLFSHHAIVSTATCMRRSSIQTSPSINPEIVCDPLSDYNW 257
QY 245 PPTPESQOSETTETVHTNEKPIVTCRLDTTMDFGVGLGAMDSLMGFVTHVAYLL 304
Db 258 SMLKPIN-----TTGTLKPDPRVVAATRLDSRSFFWNVAPGASAVASFTQLAAAEAL 312
QY 305 KQLLPQSKDLHNVLFVTFNGESYDIQSOFVYDMEKLOFPTSTGTPPIAFDNDIFML 364
Db 313 -QKAPDVTTLPNVMFVFFQGETFDYIGSSRMVYDMEKGF-----PVQLENVDSFV 363
QY 365 DIGTLDIDISNIKL--H-----ALNGTTLAQOILRLNNYAKSPRYGFNLNI--QSEMSAHL 416
Db 364 ELQOVALRISLELWMTDTPVSKNESVRNQEVDLLATLEKSGA-GVPVILRRPNQSQPL 422
QY 417 PPTSAQSLRDPNENALIL---NARPTNKYHSTYDDADNDVDTYANTSKDPTQTEVN 473
Db 423 PPSLQRFLEA-RNIGSVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFTV 481
QY 474 DFKSLNPDSLOMKVRNVSSIVAMALYQTTITGKYTGKTVKANPLMADEFLYCFLOSADCP 533
Db 482 DTAKALAD-----VATVGLRALYELAGTNFSDTVQADPQTVTRLLYGLFIKANNSW 533
QY 534 FKA-----ASYPGSQTNLPPMYIISVLGSGQSSGYTRLLGYLLSOLQ---PDIHRD 584
Db 534 FQSILRQDLRSYLDG---PLQHYIAV-----SSPTNTYVVOYALANLTGTVVNLTR 584
QY 585 NCTDL-----PLHYFAGFNNGECRLTTONYSHALSAPFIDGYDWS 626
Db 585 QCQDFSKVPSENKDLYEYSWVQGPLH-SNETDRLPRCVSTARLARALSAFELS--QMS 641
QY 627 SGMYSTWSTESQSFARIFLRPSNVHQTTLISVGIWVLIISFCLVYIISSEVILF 683
Db 642 STEYSTWSTESRWKDIRARIFLIASKLELITITVGFGLIFSLIVTYCINAKADVL 698

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RESULT 12

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US-10-121-049-202
; Sequence 202, Application US/10121049
; Publication No. US2003002239A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria A.
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tamas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; FILE REFERENCE: P3330R1C17
; CURRENT APPLICATION NUMBER: US/10/121,049
; CURRENT FILING DATE: 2002-04-12
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 202

```

```

; LENGTH: 709
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-121-049-202

Query Match 21.4%; Score 786.5; DB 14; Length 709;
Best Local Similarity 30.5%; Pred. No. 1.9e-67;
Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;

QY 12 LLTISYGATIA---QGERTRDKMYEPIG-GASCERLNGTHQGCSTYSYSGVGLHLIN 67
Db 18 LRLLSFCVLLAGLCRNSVERKIYIPINKTAPCVRLNLNATHQGCCSSISGDTGVHIVE 77
QY 68 VEADLEFLSSPSPYPYAPMIPPHLEFRNNLMELKEAGPKNISVLLINRNTQMKOFSHE 127
Db 78 KEEDLQWLVDGPNPPVWVLLSKHFTDRDLMEKLGKTSRIAGLAVSLTKPSPASGSPS 137
QY 128 LNCNPQVSGLNSGTCDSANPAK-NWNPWGTLGHHEDFPPIYIADLDQVTKLEKCFQ 186
Db 138 VQCPNDGFGVYNSYGEFAHCRKREIOWNSLGNGLAYEDFPFIFFLEDENETKVIKQCYQ 197
QY 187 DENHNHETHALRSLCAVEKSFMSAAVTEVCMRTNFIN--NLGSKYCDPLEGRNVS 244
Db 198 DHNLSQNGSAPTPCLCAMQLFSHHAIVSTATCMRRSSIQTSPSINPEIVCDPLSDYNW 257
QY 245 PPTPESQOSETTETVHTNEKPIVTCRLDTTMDFGVGLGAMDSLMGFVTHVAYLL 304
Db 258 SMLKPIN-----TTGTLKPDPRVVAATRLDSRSFFWNVAPGASAVASFTQLAAAEAL 312
QY 305 KQLLPQSKDLHNVLFVTFNGESYDIQSOFVYDMEKLOFPTSTGTPPIAFDNDIFML 364
Db 313 -QKAPDVTTLPNVMFVFFQGETFDYIGSSRMVYDMEKGF-----PVQLENVDSFV 363
QY 365 DIGTLDIDISNIKL--H-----ALNGTTLAQOILRLNNYAKSPRYGFNLNI--QSEMSAHL 416
Db 364 ELQOVALRISLELWMTDTPVSKNESVRNQEVDLLATLEKSGA-GVPVILRRPNQSQPL 422
QY 417 PPTSAQSLRDPNENALIL---NARPTNKYHSTYDDADNDVDTYANTSKDPTQTEVN 473
Db 423 PPSLQRFLEA-RNIGSVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFTV 481
QY 474 DFKSLNPDSLOMKVRNVSSIVAMALYQTTITGKYTGKTVKANPLMADEFLYCFLOSADCP 533
Db 482 DTAKALAD-----VATVGLRALYELAGTNFSDTVQADPQTVTRLLYGLFIKANNSW 533
QY 534 FKA-----ASYPGSQTNLPPMYIISVLGSGQSSGYTRLLGYLLSOLQ---PDIHRD 584
Db 534 FQSILRQDLRSYLDG---PLQHYIAV-----SSPTNTYVVOYALANLTGTVVNLTR 584
QY 585 NCTDL-----PLHYFAGFNNGECRLTTONYSHALSAPFIDGYDWS 626
Db 585 QCQDFSKVPSENKDLYEYSWVQGPLH-SNETDRLPRCVSTARLARALSAFELS--QMS 641
QY 627 SGMYSTWSTESQSFARIFLRPSNVHQTTLISVGIWVLIISFCLVYIISSEVILF 683
Db 642 STEYSTWSTESRWKDIRARIFLIASKLELITITVGFGLIFSLIVTYCINAKADVL 698

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RESULT 13

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US-10-123-904-202
; Sequence 202, Application US/10123904
; Publication No. US20030022328A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Desnoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.

```

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; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C54
; CURRENT APPLICATION NUMBER: US/10/123,904
; CURRENT FILING DATE: 2002-04-16
; Prior Application removed - See File Wrapper or Palm
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 202
; LENGTH: 709
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-123-904-202

Query Match      21.4%; Score 786.5; DB 14; Length 709;
Best Local Similarity 30.5%; Pred. No. 1.9e-67;
Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;

Qy 12 LLILSYGATIA---QGERTRDKMYEPIG-GASCERRLNGTHQTGCSSTYSGSVGLHLIN 67
Db 18 LRLSFCVLLAGLCRGNSVERKIYIPLNKTAPCVRLLNATHQIGCQSSISDGTGVHVE 77
Qy 68 VEADLEFLSSPPSPYPAMIPPHLFTNNMLRLKEAGPKNISVLLINRTNMQKQFSHE 127
Db 78 KEEDLQWLTDGPNPPYVLLSKHFTRLDMKLGKRTSRIAGLAVSLTKPSASGFS 137
Qy 128 LNCENQVSGLNSSETCDASNPAC-NWNPWGTGLLHEDFPPIYIADLDQVTKLECFQ 186
Db 138 VOCENDGFGVYSNGYGEFAHCHREIQWNSLGNGLAYEDFSFPILEDENETKVIQCYQ 197
Qy 187 DFNNHYETHALRSCLAVEKSFMSAAVNTVCMMRTNFIN--NLGGSKYCDPLEGRNVS 244
Db 198 DHNLSONGSAPTFFLCAMQLFESHMAVISTATCMRSSIQSTFSINPEIVCDPLSDYNVW 257
Qy 245 PPTCSQSQSTTLETVHNEKFIIVTRCLRTTTMFDGVLGAMDSLMGFVTHVAYLL 304
Db 258 SMLKPIN-----TTGTLKPDVVRVVAATRLDSRFFWNPVAPGAESAVSFVTLAAAEAL 312
Qy 305 KQLLPPQSKDLHNLVLTENGESDYIGSORFVYDMKLOFPTSTGTPTPIAFDNIDFML 364
Db 313 -QKAPDVTTLPRNVMFVFFQGETFDYIGSRMVYDMKGF-----PVQLENVDSFV 363
Qy 365 DIGWLDISNKL--H-----ALNGTTTAAQQLERLNNYAKSPRYGFNLNI--QSEMSAHL 416
Db 364 ELGQVALRTSLELWMHTDPVSKNESVRNQVEDLLATLEKSGA-GVPAVILRRPNQSQPL 422
Qy 417 PPTSAQSFRLDRPNFALIL---NARPTNKYHSTYDDADNVDTYANTSKDFTQLTVEVN 473
Db 423 PPSLQQLFLRA-RNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFTV 481
Qy 474 DFKSLNPDSLQMKVRNVSSIVAMALYQITITGKEYTGTGVKVNPLMADEFLYCFQASDCPL 533
Db 482 DTAKALAD-----VATVGLRALYELAGTNSFDTVQADPQVTRLLYGLFLKANNWS 533
Qy 534 FKA-----ASYGQSTNLPMPKXIYISVLGGSQSSGYTYRLLGYLLSOLQ---PDHHRD 584
Db 534 FQSLRQDLRSYLDG---PLQHYIAV-----SSPTNTTVVQYALANLGTVNVNLTRE 584
Qy 585 NCTDL-----PLHPFAGNNITGEBRLTITQNTYSHALSAPFLIDGVDWS 626
Db 585 QCQDPSKVPSENKDLXYBSWVQGLH--SNETDRLPKRCVRSSTARLARALSAPFELS--QWS 641
Qy 627 SGMYSTWTSTWSQSFARIFLRPNHMQVTTLSVIGVIVLLISFCVLVIISSRSVLF 683
Db 642 STEYSTWTSEKWDIRARIFLIASKELELITLVGFGLIFSLIVTYCINAKADVLK 698

```

```

RESULT 14
US-10-140-470-202
; Sequence 202, Application US/10140470
; Publication No. US20030022331A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Beresini, Maureen
; APPLICANT: DeForge, Laura
; APPLICANT: Deanoyers, Luc
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Geritsen, Mary E.
; APPLICANT: Goddard, Audrey
; APPLICANT: Godowski, Paul J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Sherwood, Steven
; APPLICANT: Smith, Victoria
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Watanabe, Colin K
; APPLICANT: Wood, William
; APPLICANT: Zhang, Zemin
; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
; TITLE OF INVENTION: ACIDS ENCODING THE SAME
; FILE REFERENCE: P3330R1C160
; CURRENT APPLICATION NUMBER: US/10/140,470
; CURRENT FILING DATE: 2002-05-06
; Prior Application removed - See Palm or File Wrapper
; NUMBER OF SEQ ID NOS: 550
; SEQ ID NO 202
; LENGTH: 709
; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-140-470-202

Query Match      21.4%; Score 786.5; DB 14; Length 709;
Best Local Similarity 30.5%; Pred. No. 1.9e-67;
Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;

Qy 12 LLILSYGATIA---QGERTRDKMYEPIG-GASCERRLNGTHQTGCSSTYSGSVGLHLIN 67
Db 18 LRLSFCVLLAGLCRGNSVERKIYIPLNKTAPCVRLLNATHQIGCQSSISDGTGVHVE 77
Qy 68 VEADLEFLSSPPSPYPAMIPPHLFTNNMLRLKEAGPKNISVLLINRTNMQKQFSHE 127
Db 78 KEEDLQWLTDGPNPPYVLLSKHFTRLDMKLGKRTSRIAGLAVSLTKPSASGFS 137
Qy 128 LNCENQVSGLNSSETCDASNPAC-NWNPWGTGLLHEDFPPIYIADLDQVTKLECFQ 186
Db 138 VOCENDGFGVYSNGYGEFAHCHREIQWNSLGNGLAYEDFSFPILEDENETKVIQCYQ 197
Qy 187 DFNNHYETHALRSCLAVEKSFMSAAVNTVCMMRTNFIN--NLGGSKYCDPLEGRNVS 244
Db 198 DHNLSONGSAPTFFLCAMQLFESHMAVISTATCMRSSIQSTFSINPEIVCDPLSDYNVW 257
Qy 245 PPTCSQSQSTTLETVHNEKFIIVTRCLRTTTMFDGVLGAMDSLMGFVTHVAYLL 304
Db 258 SMLKPIN-----TTGTLKPDVVRVVAATRLDSRFFWNPVAPGAESAVSFVTLAAAEAL 312
Qy 305 KQLLPPQSKDLHNLVLTENGESDYIGSORFVYDMKLOFPTSTGTPTPIAFDNIDFML 364
Db 313 -QKAPDVTTLPRNVMFVFFQGETFDYIGSRMVYDMKGF-----PVQLENVDSFV 363
Qy 365 DIGTLDIDISNKL--H-----ALNGTTTAAQQLERLNNYAKSPRYGFNLNI--QSEMSAHL 416
Db 364 ELGQVALRTSLELWMHTDPVSKNESVRNQVEDLLATLEKSGA-GVPAVILRRPNQSQPL 422
Qy 417 PPTSAQSFRLDRPNFALIL---NARPTNKYHSTYDDADNVDTYANTSKDFTQLTVEVN 473
Db 423 PPSLQQLFLRA-RNISGVVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFTV 481
Qy 474 DFKSLNPDSLQMKVRNVSSIVAMALYQITITGKEYTGTGVKVNPLMADEFLYCFQASDCPL 533

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Db 482 DTAKALAD-----VATVGLRALYELAGTNEFSDTVQADPQTVTRLLYGLFKANNWSW 533
 QY 534 FKA-----ASYPGSQTNLPPMYIISVLGGSQSSGYTVRLLYGLLSQIQ-----PDHHRD 584
 Db 534 FQSILRQDLRSYLGDG-----PLQHYIAV-----SSPTNTTVVQYALANLTGTVVNLTR 584
 QY 585 NCTDL-----PLHYFAGFNNIGECRLTTONYSHALSPAFLIDGYDWS 626
 Db 585 QCQDPKVPSENKDLVEYSWVQGLH-SNETDLPVCRVSTARLARALSPAFLS--OWS 641
 QY 627 SGMYSTWSTWSQFSARIFLRPSNVHQVTTLSVGIIVLLIISFCVLIISRSRSEVLF 683
 Db 642 STEYSTWTSRWMKDIRARIFLIASKELELITLTVGFGILIFSLIVTYCINAKADVLF 698

RESULT 15

US-10-175-746-202
 ; Sequence 202, Application US/10175746
 ; Publication No. US20030027270A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Baker, Kevin P.
 ; APPLICANT: Beresini, Maureen
 ; APPLICANT: Deforge, Laura
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerritsen, Mary B.
 ; APPLICANT: Goddard, Audrey
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Sherwood, Steven
 ; APPLICANT: Smith, Victoria
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tamas, Daniel
 ; APPLICANT: Watanabe, Colin X
 ; APPLICANT: Wood, William
 ; APPLICANT: Zhang, Zemin
 ; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
 ; FILE REFERENCE: P3330RIC353
 ; CURRENT APPLICATION NUMBER: US/10/175,746
 ; CURRENT FILING DATE: 2002-06-19
 ; Prior Application removed - See File Wrapper or Palm
 ; NUMBER OF SEQ ID NOS: 550
 ; SEQ ID NO 202
 ; LENGTH: 709
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 ; US-10-175-746-202

Query Match 21.4%; Score 786.5; DB 14; Length 709;
 Best Local Similarity 30.5%; Pred. No. 1.9e-67;
 Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;
 QY 12 LAILSYGATIA---QGERTRDKMYEPIG-GASCFRRLNGTHGTGCSSTYSYSGVGLHLIN 67
 Db 18 LRLLSFCVLLAGLCRCNSVERKIYIPLNKTAFCVRLINATHQIGCOSSISGDTGVHVE 77
 QY 68 VEADLEFLLSSPPSPYAPMIPHLTRNNMLKKEAGPKNISVLLINRTNQMKQFSHE 127
 Db 78 KEEDLQWLTDGPNPPYVLLSKHFTDRIMEXLKGRTSRAGLAVSLTKPSPASGFSFS 137
 QY 128 LNCPCQYSLNSTSETCDASNPAAK-NWNPMTGTLHEDFPPIYIYIADLDQVTKLEKCFQ 186
 Db 138 VQCPNDGFGVYSNGYEPFAHCREIOWNSLGNLAYERDFPFILEDENETKVIKQCYQ 197
 QY 187 DFNHNYETHALSLCAVEKFSMAAVNTEVCVCRXTNFIN--NLGGSYCDPLEGKNYS 244
 Db 198 DHNLSQNGSAPTPPLCAMQLFSHHAVISTATCMRESSIQSTFSINPEIVCDPLSDYNW 257
 QY 245 PCTPSPSQSQTLETTHVHNEKELVTCRLDTMTTFDGVGLGAMDSIMGFAVETHVAYLL 304
 Db 258 SMLKPIN-----TTGTLKPDORVVAATRLDSRSEFWNVAPGAESAVASVFTQLAAAEAL 312

QY 305 KQLLPQSKDLHNVLVFTFNGESYDYGISQRFYVDMEKLOFTESTGTPTPIAFDNIDFML 364
 Db 313 -QKAPDVTTLPRNVMFVFQGETFDYIGSSRWVYDMKGF-----PVQLENVDSFV 363
 QY 365 DICTLDDISNKL--H-----ALNGTTILAQOILRLANNYAKSPRYGNINI--QSEMSAHL 416
 Db 364 ELGQVALRTSLLEWMHTDPVSQKNESVRNQVEDLLATLEKSGA-GVPAVILRRPNQSOPL 422
 QY 417 PPTSQAQSFLLRRDPNFNALIL---NARPTNKYVHSTYDDADNDVFTYANTSKDFTQLTEVN 473
 Db 423 PPSLQRFLEA-RNISGVVLADHSGAFHKKYQSIYDTAENINVSIPWLSPEEDLNFTV 481
 QY 474 DFKSLNPDSLQMKVRNVSSIVAMALYQITGKEYTGTGVANPLMADEFLYCFLQSDADCL 533
 Db 482 DTAKALAD-----VATVGLRALYELAGTNEFSDTVQADPQTVTRLLYGLFKANNWSW 533
 QY 534 FKA-----ASYPGSQTNLPPMYIISVLGGSQSSGYTVRLLYGLLSQIQ-----PDHHRD 584
 Db 534 FQSILRQDLRSYLGDG-----PLQHYIAV-----SSPTNTTVVQYALANLTGTVVNLTR 584
 QY 585 NCTDL-----PLHYFAGFNNIGECRLTTONYSHALSPAFLIDGYDWS 626
 Db 585 QCQDPKVPSENKDLVEYSWVQGLH-SNETDLPVCRVSTARLARALSPAFLS--OWS 641
 QY 627 SGMYSTWSTWSQFSARIFLRPSNVHQVTTLSVGIIVLLIISFCVLIISRSRSEVLF 683
 Db 642 STEYSTWTSRWMKDIRARIFLIASKELELITLTVGFGILIFSLIVTYCINAKADVLF 698

Search completed: March 18, 2004, 12:15:02
 Job time : 40.1161 secs

GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on: March 18, 2004, 11:48:08 ; Search time 52.9665 Seconds
(without alignments)
3707.446 Million cell updates/sec

Title: US-09-945-258-18

Perfect score: 3675

Sequence: 1 MEMRNAASTWILISVGAT.....SSRSEVLFEDLPASNAALFG 695

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_29Jan04:*
1: Geneseq1990s:*
2: Geneseq1990s:*
3: Geneseq2000s:*
4: Geneseq2001s:*
5: Geneseq2002s:*
6: Geneseq2003as:*
7: Geneseq2003bs:*
8: Geneseq2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	3675	100.0	695	3	AAU97551 D. melano
2	3675	100.0	695	5	AAU79387 Fruit fly
3	3361	91.5	716	5	AAO14236 Human pre
4	3006.5	81.8	604	4	ABG62877 Drosophil
5	793.5	21.6	708	3	AAU97550 Mouse PAM
6	787.5	21.4	708	5	AAU79386 Murine pr
7	787	21.4	690	5	AAE20269 Human lun
8	787	21.4	742	7	ADE79010 Human pro
9	786.5	21.4	708	5	AAO14235 Drosophil
10	786.5	21.4	709	3	AAU97549 Human pro
11	786.5	21.4	709	4	AAU12272 Human PAM
12	786.5	21.4	709	4	AAU63935 Amino aci
13	786.5	21.4	709	4	AAU39096 Human pol
14	786.5	21.4	709	5	AAU79385 Human pre
15	786.5	21.4	709	5	AAU98012 Human ami
16	786.5	21.4	709	6	ABO17716 Novel hum
17	786.5	21.4	709	6	ABU80970 Human PRO
18	786.5	21.4	709	6	ABU66670 Human PRO
19	786.5	21.4	709	6	ABU59751 Novel sec
20	786.5	21.4	709	6	ABO24941 Human sec
21	786.5	21.4	709	6	ABU66946 Human sec
22	786.5	21.4	709	6	ADA5721 Novel hum
23	786.5	21.4	709	6	ADA76152 Human PRO
24	786.5	21.4	709	6	ADA18802 Human PRO
25	786.5	21.4	709	6	ADA61425 Homo sapi

26	786.5	21.4	709	6	ADB19210	Novel hum
27	786.5	21.4	709	6	ADB27751	Human PRO
28	786.5	21.4	709	6	ADA86230	Novel hum
29	786.5	21.4	709	6	ADB15794	Human PRO
30	786.5	21.4	709	6	ADA47580	Human PRO
31	786.5	21.4	709	6	ADA67375	Human PRO
32	786.5	21.4	709	6	ADB30382	Human PRO
33	786.5	21.4	709	6	ADA85678	Novel hum
34	786.5	21.4	709	6	ADA96890	Human PRO
35	786.5	21.4	709	6	ADA79194	Human PRO
36	786.5	21.4	709	6	ADA87333	Novel hum
37	786.5	21.4	709	6	ADB16535	Human PRO
38	786.5	21.4	709	6	ADA91627	Novel hum
39	786.5	21.4	709	6	ADB14690	Human PRO
40	786.5	21.4	709	6	ADB18651	Novel hum
41	786.5	21.4	709	6	ADA93866	Human PRO
42	786.5	21.4	709	6	ADB19762	Novel hum
43	786.5	21.4	709	6	ADB13074	Human PRO
44	786.5	21.4	709	6	ABO43249	Novel hum
45	786.5	21.4	709	6	ADA74328	Human PRO

ALIGNMENTS

RESULT 1
AAU97551
ID AAY97551 standard; protein; 695 AA.
XX AC AAY97551;
XX AC
DT 12-FEB-2001 (first entry)
XX AC
DE D. melanogaster PAMP protein sequence.
XX
KW PAMP; presenilin associated membrane protein; immunogen;
KW neurodegenerative disease; Alzheimer's disease; Lewy body variant;
KW Parkinson's disease-dementia complex; neuropsychiatric disease;
KW schizophrenia; age-associated memory loss; developmental disorder;
KW neoplasm; diagnosis.
XX OS Drosophila melanogaster.
XX PN WO200060069-A1.
XX PD 12-OCT-2000.
XX PF 03-APR-2000; 2000WO-CA000354.
XX PR 01-APR-1999; 99US-0127452P.
XX PR 30-DEC-1999; 99US-0173826P.
XX PA (UTOR) UNIV TORONTO GOVERNING COUNCIL.
XX
XX St George- Hyslop PH, Frazer PE;
XX WPI; 2000-665001/64.
XX N-PSDB; AAA37887.
Isolated presenilin associated membrane proteins and nucleic acids encoding them, useful for investigating and diagnosing Alzheimer's disease and other neurodegenerative diseases.
Claim 3; Page 75-77; 79pp; English.
This sequence is a presenilin associated membrane protein (PAMP) of the invention. PAMP polypeptides may be used as an immunogen to generate antibodies that recognise the PAMP polypeptide. The PAMP nucleotide and protein sequence may also be used for diagnosing individuals who are at risk or who have a variety of neurodegenerative diseases (e.g. Alzheimer's disease, Lewy body variant, Parkinson's disease-dementia complex), neuropsychiatric diseases (e.g. schizophrenia, age-associated memory loss), developmental disorders, and neoplasms. These may further

CC be used to deduce the structural organization and topology of PAMP, to
 CC identify proteins which interact with PAMP either in concert with
 CC presenilin 1 (PS1) and PS2, or independently, and to create cell-free
 CC systems, transfected cell lines, and animal models of neurodegenerative
 CC and other diseases
 XX
 SQ Sequence 695 AA;

Query Match 100.0%; Score 3675; DB 3; Length 695;
 Best Local Similarity 100.0%; Pred. No. 8.7e-312;
 Matches 695; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEMRLNAASIWLLILSYGATIAQGERTRDKMVEPIGGASCFRLNCTHQTGCSSTYSGV 60
 Db 1 MEMRLNAASIWLLILSYGATIAQGERTRDKMVEPIGGASCFRLNCTHQTGCSSTYSGV 60

Qy 61 GVLHLINVEADLEFLSSPPPPYAPMIPPHLFRNNLMRLKEAGPKNISVLLINRTNQ 120
 Db 61 GVLHLINVEADLEFLSSPPPPYAPMIPPHLFRNNLMRLKEAGPKNISVLLINRTNQ 120

Qy 121 MKQFSHELNCNPOYSGNLSTSETCDASNPKNWPMGTGLLHEDFPPIYIADLDQVTK 180
 Db 121 MKQFSHELNCNPOYSGNLSTSETCDASNPKNWPMGTGLLHEDFPPIYIADLDQVTK 180

Qy 181 LEKCFQDFNNHNYETHALRSLCAVEVKSFMASAVNTEVCMRTNFNNLGGSKYCDPLEG 240
 Db 181 LEKCFQDFNNHNYETHALRSLCAVEVKSFMASAVNTEVCMRTNFNNLGGSKYCDPLEG 240

Qy 241 RNVSPPCTPESQSETHLETVHTNEKFLVTRCLDTTMTFVGVLGAMDSLGMGFAVTHV 300
 Db 241 RNVSPPCTPESQSETHLETVHTNEKFLVTRCLDTTMTFVGVLGAMDSLGMGFAVTHV 300

Qy 301 AYLLKQLLPPOSKDLHNVLFVTENGESVDYIGSORFVYDMEKLOPPTSTGTPIAFDNI 360
 Db 301 AYLLKQLLPPOSKDLHNVLFVTENGESVDYIGSORFVYDMEKLOPPTSTGTPIAFDNI 360

Qy 361 DFMLDGTDDISNKLHALNGTTTAAQILRLNNYAKSPRYGNLNTQSEMSAHLPTS 420
 Db 361 DFMLDGTDDISNKLHALNGTTTAAQILRLNNYAKSPRYGNLNTQSEMSAHLPTS 420

Qy 421 AQSLRDPDPFNALINARPKNKYHSTYDDADNVDFTYANTSKDFTQLTEVNDPKSLNP 480
 Db 421 AQSLRDPDPFNALINARPKNKYHSTYDDADNVDFTYANTSKDFTQLTEVNDPKSLNP 480

Qy 481 DSLQMKVRNVSSIIVAMALYOTITGKVTGKVNPLMADELYCFLOSADCPLEKASYP 540
 Db 481 DSLQMKVRNVSSIIVAMALYOTITGKVTGKVNPLMADELYCFLOSADCPLEKASYP 540

Qy 541 GSQTLNLPMPRYISVLGSGQSSGYTYRLLGYLLSQLQPDHNRDCTDLPLHYFAGFNNI 600
 Db 541 GSQTLNLPMPRYISVLGSGQSSGYTYRLLGYLLSQLQPDHNRDCTDLPLHYFAGFNNI 600

Qy 601 GECLTTONYSHALSPFLIDYDWSGMVSTWTSTWQSFARIFLRPSNVHQTTLVS 660
 Db 601 GECLTTONYSHALSPFLIDYDWSGMVSTWTSTWQSFARIFLRPSNVHQTTLVS 660

Qy 661 GIVLLIISFCLVIYIISRSEVLFDLPASNAALFG 695
 Db 661 GIVLLIISFCLVIYIISRSEVLFDLPASNAALFG 695

RESULT 2
 AAU79387
 ID AAU79387 standard; protein; 695 AA.
 XX
 AC AAU79387;
 XX
 DT 02-JUL-2002 (first entry)
 XX
 DE Fruit fly presenilin associated membrane protein (PAMP).
 XX
 KW PAMP; Presenilin associated membrane protein; neuropsychiatric disorder;
 KW neurodevelopmental disorder; schizophrenia; neurodegenerative disorder;

Alzheimer's disease; Lewy body variant; mild cognitive impairment;
 depression; benign senescent forgetfulness; psychosis; schizoaffective;
 schizotypal; schizophrenia; delusional disorder; personality disorder;
 schizoid personality disorder; schizotypal personality disorder;
 paranoid personality disorder; fruit fly.

Drosophila melanogaster.
 WO200218434-A2.
 07-MAR-2002.
 31-AUG-2001; 2001WO-CA001243.
 01-SEP-2000; 2000US-0229889P.
 (UTOR) UNIV TORONTO GOVERNING COUNCIL.
 St George- Hyslop PH, Fraser PE;
 WPI; 2002-329756/36.
 N-PSDB; ABK48343.

Use of (gene encoding) presenilin-associated membrane protein as reagent
 for diagnosing individuals predisposed to or having
 neuropsychiatric/neurodevelopmental disorder, or as therapeutic target
 for treating disorder.

Example 1; Fig 1A-B; 69pp; English.

The invention describes the use of presenilin-associated membrane protein (PAMP) as a reagent for diagnosing individuals predisposed to or having neuropsychiatric or neurodevelopmental disorder (NND), or for identifying a compound useful for treating NND, or as a therapeutic target for treatment of NND. The protein is useful for diagnosing individuals predisposed to or having NND e.g. schizophrenia, by detecting mutation in gene encoding PAMP by measuring level of transcriptional activity of the gene, or by measuring PAMP activity which comprises PAMP expression level or activity of a product of a PAMP modified substrate. Transgenic animal models can be screened for compounds that modulate activity of PAMP and the presenilins. The identified compounds, or gene therapy with PAMP, can be used to treat neurodevelopmental disorders, neurodegenerative disorders e.g. Alzheimer's disease and Lewy body variant, and neuropsychiatric disorders such as depression, mild cognitive impairment and benign senescent forgetfulness, schizophrenia and related psychoses e.g. schizoaffective, schizotypal, schizophrenia and delusional disorders and personality disorders such as schizoid personality disorder, schizotypal personality disorder and paranoid personality disorder. This is the amino acid sequence of a fruit fly presenilin associated membrane protein (PAMP)

SQ Sequence 695 AA;

Query Match 100.0%; Score 3675; DB 5; Length 695;
 Best Local Similarity 100.0%; Pred. No. 8.7e-312;
 Matches 695; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 MEMRLNAASIWLLILSYGATIAQGERTRDKMVEPIGGASCFRLNCTHQTGCSSTYSGV 60
 Db 1 MEMRLNAASIWLLILSYGATIAQGERTRDKMVEPIGGASCFRLNCTHQTGCSSTYSGV 60

Qy 61 GVLHLINVEADLEFLSSPPPPYAPMIPPHLFRNNLMRLKEAGPKNISVLLINRTNQ 120
 Db 61 GVLHLINVEADLEFLSSPPPPYAPMIPPHLFRNNLMRLKEAGPKNISVLLINRTNQ 120

Qy 121 MKQFSHELNCNPOYSGNLSTSETCDASNPKNWPMGTGLLHEDFPPIYIADLDQVTK 180
 Db 121 MKQFSHELNCNPOYSGNLSTSETCDASNPKNWPMGTGLLHEDFPPIYIADLDQVTK 180

Qy 181 LEKCFQDFNNHNYETHALRSLCAVEVKSFMASAVNTEVCMRTNFNNLGGSKYCDPLEG 240
 Db 181 LEKCFQDFNNHNYETHALRSLCAVEVKSFMASAVNTEVCMRTNFNNLGGSKYCDPLEG 240

241 RNVSPCTPESQOSETTLEVTHTNEKFLVTCRLDITMTDVGGLGAMDSLGMFAVTHV 300
 241 RNVSPCTPESQOSETTLEVTHTNEKFLVTCRLDITMTDVGGLGAMDSLGMFAVTHV 300
 301 AYLLKQLLPQSKDLHNVLFVTFNGESVDYIGSORFVYDMEKLOPPTSTGTPPIAFDNI 360
 301 AYLLKQLLPQSKDLHNVLFVTFNGESVDYIGSORFVYDMEKLOPPTSTGTPPIAFDNI 360
 361 DFMLDICTGLDDISNKLHALNGTTLAQOILRLNNYAKSPRYGNLNIQSEMSAHLPTS 420
 361 DFMLDICTGLDDISNKLHALNGTTLAQOILRLNNYAKSPRYGNLNIQSEMSAHLPTS 420
 421 AQSLRDRDPNFNALLNARPNKYHYHSTYDDADNVDFTYANTSKDFTQLTEVNDFKSLNP 480
 421 AQSLRDRDPNFNALLNARPNKYHYHSTYDDADNVDFTYANTSKDFTQLTEVNDFKSLNP 480
 481 DSLQMKVRNVSSIVAMALYQITITGKEYTGKVNPLMADEFLYCFLOSADCLFKAASYP 540
 481 DSLQMKVRNVSSIVAMALYQITITGKEYTGKVNPLMADEFLYCFLOSADCLFKAASYP 540
 541 GSQTLNLPMPRYISVLGSGQESSGYTYRLLYGILLSQLOPDHNRDNCITDPLHYFAGFNNI 600
 541 GSQTLNLPMPRYISVLGSGQESSGYTYRLLYGILLSQLOPDHNRDNCITDPLHYFAGFNNI 600
 601 GECLRTTQNYSHALSPAFLLIDGYDWSGMYSTWTSTWQSFARIFLRPNVHQTLSV 660
 601 GECLRTTQNYSHALSPAFLLIDGYDWSGMYSTWTSTWQSFARIFLRPNVHQTLSV 660
 661 GIVLLIISFCLVYIISSRSVLFEDLPASNAALFG 695
 661 GIVLLIISFCLVYIISSRSVLFEDLPASNAALFG 695

RESULT 3
 AAO14236
 ID AAO14236 standard; protein; 716 AA.
 AC AAO14236;
 XX
 DT 10-MAY-2002 (first entry)
 DE Human presenilin enhancer protein Aph-4 SEQ ID NO: 15.
 XX Human; fruit fly; mouse; rat; cow; presenilin enhancer protein; pen;
 KW Alzheimer's disease; pen-1; pen-1B; pen-2; Aph-2; amyloid beta.
 XX Homo sapiens.
 OS
 XX WO200185912-A2.
 XX 15-NOV-2001.
 XX 03-MAY-2001; 2001WO-US014648.
 XX 05-MAY-2000; 2000US-00568942.
 XX (EXEL-) EXELIXIS INC.
 XX Curtis DT, Francis GR, Ellis MC, Ruddy DA, Nicoll SM, McGrath GJ;
 WPI; 2002-062245/08.
 XX Presenilin enhancer proteins and polynucleotides useful for modulating
 PT presenilin function and screening for an agent that modulates the
 PT interaction of the protein to a binding target.
 XX
 XX Disclosure; Page 55-57; 78pp; English.

XX The present invention relates to a method of detecting compounds capable
 CC of altering the interaction between a presenilin enhancer protein (such
 CC as pen-1, pen-1B, pen-2 and Aph-2) and presenilin. The inhibition of
 CC presenilin activity causes the production of amyloid beta to be reduced
 CC and thus be used in the treatment of Alzheimer's disease. The present

CC sequence is a presenilin enhancer protein described in the
 CC exemplification of the invention
 XX
 SQ Sequence 716 AA;
 Query Match 91.5%; Score 3361; DB 5; Length 716;
 Best Local Similarity 91.5%; Pred. No. 2.5e-284;
 Matches 647; Conservative 9; Mismatches 27; Indels 24; Gaps 3;
 QY 1 MEMRLNAASIIWLLISYGATIAQGERTRDKVYPIGASCFRLNGTHQTGCSSTYSGSV 60
 DB 22 MEMRLNAASIIWLLISYGATIAQGERTRDKVYPIGASCFRLNGTHQTGCSSTYSGSV 81
 QY 61 GVHLINVEADLBFLLSSPPSPYAPMI PPHLPTNNLMELKEAGPKNISVLLINRTNQ 120
 DB 82 GVHLINVEADLBFLLSSPPSPYAPMI PPHLPTNNLMELKEAGPKNISVLLINRTNQ 141
 QY 121 MKQPSHELNCPCNOYSGLNSTSETCDASNPAKWNPMGTGLLHEDFPPIYIADLDQVTK 180
 DB 142 MKQPSHELNCPCNOYSGLNSTSETCDASNPAKWNPMGTGLLHEDFPPIYIADLDQVTK 201
 QY 181 LKCFODFNHNHNYETHALRSCLCAVEVKSFMASAAVTEVCMRRTNFNNLGSKYCDPLEG 240
 DB 202 LKCFODFNHNHNYETHALRSCLCAVEVKSFMASAAVTEVCMRRTNFNNLGSKYCDPLEG 261
 QY 241 RNVSPCTPESQOSETTLEVTHTNEKFLVTCRLDITMTDVGGLGAMDSLGMFAVTHV 299
 DB 262 RNVSPCTPESQOSETTLEVTHTNEKFLVTCRLDITMTDVGGLGAMDSLGMFAVTHV 309
 QY 300 -----VAYLLKQLLPQSKDLHNVLFVTFNGESVDYIGSORFVYDMEKLOPPTTE 348
 DB 310 LPYGIQWQFQSVGLYLLKQLLPQSKDLHNVLFVTFNGESVDYIGSORFVYDMEKLOPPTTE 369
 QY 349 STGTPTPIAFDNI DFLDIDIGTLDISNKLHALNGTTLAQOILRLNNYAKSPRYGNLNI 408
 DB 370 STGTPTPIAFDNI DFLDIDIGTLDISNKLHALNGTTLAQOILRLNNYAKSPRYGNLNI 429
 QY 409 QSEMSAHLPTSAQSFRLRDPNFNALLNARPNKYHYHSTYDDADNVDFTYANTSKDFTQ 468
 DB 430 QSEMSAHLPTSAQSFRLRDPNFNALLNARPNKYHYHSTYDDADNVDFTYANTSKDFTQ 489
 QY 469 LTVNDFKSLNPDSLQMKVRNVSSIVAMALYQITITGKEYTGKVNPLMADEFLYCFLOS 528
 DB 490 LTVNDFKSLNPDSLQMKVRNVSSIVAMALYQITITGKEYTGKVNPLMADEFLYCFLOS 549
 QY 529 ADCPLFKAASYFGSQTNLPPMPRYISVLGSGQESSGYTYRLLYGILLSQLOPDHNRDNCITD 588
 DB 550 ADCPLFKAASYFGSQTNLPPMPRYISVLGSGQESSGYTYRLLYGILLSQLOPDHNRDNCITD 609
 QY 589 LPLHYFAGFNNIGECLRTTQNYSHALSPAFLLIDGYDWSGMYSTWTSTWQSFARIFLR 648
 DB 610 LPLHYFAGFNNIGECLRTTQNYSHALSPAFLLIDGYDWSGMYSTWTSTWQSFARIFLR 669
 QY 649 PSNVHQTLSVGIIVLLIISFCLVYIISSRSVLFEDLPASNAALFG 695
 DB 670 PSNVHQTLSVGIIVLLIISFCLVYIISSRSVLFEDLPASNAALFG 716

RESULT 4
 ABB62877
 ID ABB62877 standard; protein; 604 AA.
 XX
 AC ABB62877;
 XX
 DT 26-MAR-2002 (first entry)
 XX
 DE Drosophila melanogaster polypeptide SEQ ID NO 15423.
 XX
 KW Drosophila; developmental biology; cell signalling; insecticide;
 KW pharmaceutical.
 XX
 OS Drosophila melanogaster.

Db 17 LLLSFSVVLGAGCGNSVERKIYIPLNKATPCVRLNATHQIGQSSISGDTGVHVE 76
 Qy 68 VEADLEFLLSPSPSPYAPMIPPLHFRNNLMRLKEAGPKNISVLLNRTNMQKQFSHE 127
 Db 77 KEEDLKWVLTGDPNPPVWLVLEGLKFTDRVMEKLGKTSRIAGLAVTLAKPNSTSSFPS 136
 Qy 128 LNCNPOYSLNSTSETCDASNPKN-WNPWGTGGLHEDFPPIYIADLDQVTKLEKCFQ 186
 Db 137 VQCPNDGFIYSNSYGFPEFAHCKTLWNLGNGLAYEDFSPIFLEDBENETKVIKQCYQ 196
 Qy 187 DFNHNYETHALRSICAVEVKSFMASAVNTEVCMRTNFIN---NLGGSKYCDPLEGRNV 243
 Db 197 DNLGONGSAPSPFLCAMQLFSMHAVISTATCMRR-SFIQSTFSINPEIVCDPLSDYV 255
 Qy 244 SPPTCTPESQOSETTLETVHTEKFLVTCRLDTTTFMDGVGLGANDSLMGFAVFTHVAYL 303
 Db 256 WSMKLPIN---TSVGLPEPDRVVVAATRLDSRFFWNVAPGASAVASFVTLQAAEA 310
 Qy 304 LKQLLPQSKDLHNLVFTVNGESYDIYIGSORFVYDMKLOPPTSTGTPTPIAFDNIDFM 363
 Db 311 LHK-APDVTTLSRNVMEVFQGETFDYIGSSRWYDMENGKE-----PVRLENIDSF 361
 Qy 364 LDIG-----TLDDISNKLHALNGTTLAQOILRLNNYAKS-----PRYGFNLNIQSEMS 413
 Db 362 VELGQVALRTSLDLWMHTDPMQKNSVKNQVEDLLATLEKSGAGVPEVLLRLAQSOA- 420
 Qy 414 AHLPTPSAQSFRLRDPNFENALIL---NARPTNKYHSTYDDADNVDFTYANTSKDTOLT 470
 Db 421 --LPPSSILQRLRA-RNLSGVVLADHSGSFNRYQSIYDAENINVTYPWQSPEDLN 477
 Qy 471 EVNDFKSLNPSLQKVNSSIVAMALYQITGKYTGKTVKVNPLMADEFLYCFLOSAD 530
 Db 478 FVTD-----TAKALANVATLALRYELAGGTNPFSSIQADPQTVTRLLYGLVKAN 529
 Qy 531 CPLFKA-----ASVPSQLTNLPMRYISVLGQSSGTYRLLGVLLSQL---OPDI 581
 Db 530 NSWFQSLKHDLRSY---LDDRPLQHYIAV-----SSPTNTTYVQVYALANLTKATNL 580
 Qy 582 HRDNCITD---LP-----LHYPAGE-----NNIGECRLTQNYSHALSPFLIDGYD 624
 Db 581 TREQCQPSKVPNBSKDIYYSWVQGPWNSNRTLPQCVSTVRLARLAPFELS--Q 638
 Qy 625 WSSQMYSTWTSTWSQFSARIFLRPSNVHVTTLISVGIWVLIISFCIVYIISRSSEVLF 683
 Db 639 WSSPEYSTWAEBSRWKDIQARIFLITASKLEETLIVGFSILIFSLIVYICINAKADLVF 697
 RESULT 6
 ID AAU79386 standard; protein; 708 AA.
 XX AAU79386;
 AC AAU79386;
 DT 02-JUL-2002 (first entry)
 XX Murine presenilin associated membrane protein (PAMP).
 DE PAMP; Presenilin associated membrane protein; neuropsychiatric disorder;
 KW neurodevelopmental disorder; schizophrenia; neurodegenerative disorder;
 KW Alzheimer's disease; Lewy body variant; mild cognitive impairment;
 KW depression; benign senescent forgetfulness; psychosis; schizoaffective;
 KW schizotypal; schizophreniform; delusional disorder; personality disorder;
 KW schizoid personality disorder; schizotypal personality disorder;
 KW paranooid personality disorder; mouse.
 OS Mus sp.
 XX
 PN W0200218434-A2.
 XX
 PD 07-MAR-2002.
 XX
 PF 31-AUG-2001; 2001WO-CA001243.
 XX

11-SEP-2000; 2000US-02298899P.
 (UTOR) UNIV TORONTO GOVERNING COUNCIL.
 St George- Hyslop PH, Fraser PE;
 WPI; 2002-329756/36.
 N-FSDB; ABK48342.
 Use of (gene encoding) presenilin-associated membrane protein as reagent
 for diagnosing individuals predisposed to or having
 neuropsychiatric/neurodevelopmental disorder, or as therapeutic target
 for treating disorder.
 Example 1; Fig 1A-B; 69pp; English.
 The invention describes the use of presenilin-associated membrane protein
 (PAMP) as a reagent for diagnosing individuals predisposed to or having
 neuropsychiatric or neurodevelopmental disorder (NND), or for identifying
 a compound useful for treating NND, or as a therapeutic target for
 treatment of NND. The protein is useful for diagnosing individuals
 predisposed to or having NND e.g. schizophrenia, by detecting mutation in
 the gene encoding PAMP by measuring level of transcriptional activity of the
 gene, or by measuring PAMP activity which comprises PAMP expression level
 or activity of a product of a PAMP modified substrate. transgenic animal
 models can be screened for compounds that modulate activity of PAMP and
 the presenilins. The identified compounds, or gene therapy with PAMP, can
 be used to treat neurodevelopmental disorders, neurodegenerative
 disorders e.g. Alzheimer's disease and Lewy body variant, and
 neuropsychiatric disorders such as depression, mild cognitive impairment
 and benign senescent forgetfulness, schizophrenia and related psychoses
 e.g. schizoaffective, schizotypal, schizophreniform and delusional
 disorders and personality disorders such as schizoid personality
 disorder, schizotypal personality disorder and paranooid personality
 disorder. This is the amino acid sequence of a murine presenilin
 associated membrane protein (PAMP)
 Sequence 708 AA;
 Query Match 21.4%; Score 787.5; DB 5; Length 708;
 Best Local Similarity 30.6%; Pred. No. 2.2e-59;
 Matches 220; Conservative 123; Mismatches 231; Indels 85; Gaps 22;
 Qy 12 LLLISYCATTA---QGERTRDKMVEPIG-GASCFRLNGTHQTCSSYSGSVLMLN 67
 Db 17 LLLLSFVVLGAGCGNSVERKIYIPLNKATPCVRLNATHQIGQSSISGDTGVHVE 76
 Qy 68 VEADLEFLLSPSPSPYAPMIPPLHFRNNLMRLKEAGPKNISVLLNRTNMQKQFSHE 127
 Db 77 KEEDLKWVLTGDPNPPVWLVLEGLKFTDRVMEKLGKTSRIAGLAVTLAKPNSTSSFPS 136
 Qy 128 LNCNPOYSLNSTSETCDASNPKN-WNPWGTGGLHEDFPPIYIADLDQVTKLEKCFQ 186
 Db 137 VQCPNDGFIYSNSYGFPEFAHCKTLWNLGNGLAYEDFSPIFLEDBENETKVIKQCYQ 196
 Qy 187 DFNHNYETHALRSICAVEVKSFMASAVNTEVCMRTNFIN---NLGGSKYCDPLEGRNV 243
 Db 197 DNLGONGSAPSPFLCAMQLFSMHAVISTATCMRR-SFIQSTFSINPEIVCDPLSDYV 255
 Qy 244 SPPTCTPESQOSETTLETVHTEKFLVTCRLDTTTFMDGVGLGANDSLMGFAVFTHVAYL 303
 Db 256 WSMKLPIN---TSVGLPEPDRVVVAATRLDSRFFWNVAPGASAVASFVTLQAAEA 310
 Qy 304 LKQLLPQSKDLHNLVFTVNGESYDIYIGSORFVYDMKLOPPTSTGTPTPIAFDNIDFM 363
 Db 311 LHK-APDVTTLSRNVMEVFQGETFDYIGSSRWYDMENGKE-----PVRLENIDSF 361
 Qy 364 LDIG-----TLDDISNKLHALNGTTLAQOILRLNNYAKS-----PRYGFNLNIQSEMS 413
 Db 362 VELGQVALRTSLDLWMHTDPMQKNSVKNQVEDLLATLEKSGAGVPEVLLRLAQSOA- 420
 Qy 414 AHLPTPSAQSFRLRDPNFENALIL---NARPTNKYHSTYDDADNVDFTYANTSKDTOLT 470

protein modification and maintenance molecule; PMMW;
protein modification; protein maintenance; protein function;
protein conformation; protein stabilisation; protein degradation; kinase;
phosphatase; protease; protease inhibitor; isomerase; transferase;
molecular chaperone; anti-HIV; anti-allergic; anti-inflammatory;
anti-anemic; antiparkinsonian; neurotropic; anticonvulsant;
antiarteriosclerotic; antiasthmatic; immunosuppressive; antithyroid;
cytostatic; hepatotropic; dermatological; antidiabetic; nephrotropic;
antigout; thyromimetic; neuroprotective; osteopathic; antiarthritic;
antiparasitic; antihelminthic; antipsoriatic; uropathic; ophthalmological;
antirheumatic; haemostatic; antibacterial; virucide; protozoacide;
fungicide; gene therapy; cell proliferative disorder; arteriosclerosis;
hepatitis; polycythaemia vera; psoriasis; primary thrombocytopaenia;
cancer; developmental disorder; Crohn's disease; diabetes mellitus;
neurological disorder; Alzheimer's disease; mental retardation;
epilepsy; autoimmune disorder; inflammatory disease; Parkinson's disease;
asthma; autoimmune thyroiditis; Crohn's disease; diabetes mellitus;
glomerulonephritis; Goodpasture's syndrome; multiple sclerosis;
arthritis; osteoporosis; pancreatitis; Sjogren's syndrome;
microbial infection; human.
XX Homo sapiens.

Key Location/Qualifiers
Misc-difference 408
/note= "May be substituted by Gly as a result of a single
nucleotide polymorphism"

WO2003063688-A2.
07-AUG-2003.
23-JAN-2003; 2003WO-US002500.
25-JAN-2002; 2002US-0351928P.
25-FEB-2002; 2002US-0359903P.
21-MAR-2002; 2002US-0366837P.
(INCY-) INCYTE GENOMICS INC.
Hafalia AFA, Li JX, Gorvad AE, Chawla NK, Sprague WW, Lee SY;
Chang H, Elliott VS, Ramkumar J, Khare R, Emerling BM, Kable AE;
Tang YT, Yue H, Gietzen KJ, Lee S, Swarnakar A, Baughn MR;
Wilson AD, Jin P, Chien D, Hawkins PR, Jiang X, Jackson AB;
Bhatia U, Burrill JD, Blake JJ, Ho A, Zheng W, Ison CH, Marquis JP;
Tran UK, Lal PG, Warren BA, Xu Y, Honchell CD, Becha SD;
Lehr-Nason PM;
WPI; 2003-636761/60.
N-PSDB; ADE79068.

New human protein modification and maintenance molecules and
polynucleotides, useful for diagnosing, treating or preventing autoimmune
or inflammatory disorders (e.g. AIDS, allergy or anemia), multiple
sclerosis or cancer.
Claim 1; SEQ ID NO 48; 405pp; English.

This invention relates to novel isolated human proteins, which are human
protein modification and maintenance molecules (PMMW). The cellular
processes regulating modification and maintenance of protein molecules
coordinate their function, conformation, stabilisation and degradation.
Each of these processes is mediated by key enzymes or proteins such as
kinases, phosphatases, proteases, protease inhibitors, isomerases,
transferases and molecular chaperones. Compounds which modulate the
proteins of the invention may have anti-HIV, anti-allergic,
anti-inflammatory, anti-anemic, antiparkinsonian, neurotropic,
anticonvulsant, antiarteriosclerotic, antiasthmatic, immunosuppressive,
antithyroid, cytostatic, hepatotropic, dermatological, antidiabetic,
nephrotropic, antigout, thyromimetic, neuroprotective, osteopathic,
antiarthritic, antiparasitic, antihelminthic, antipsoriatic, uropathic,
ophthalmological, antirheumatic, haemostatic, antibacterial, virucide,
protozoacide or fungicide activities. The DNA sequence which encode the

proteins of the invention may be useful for gene therapy. The human
protein modification and maintenance molecules (PMMWs), the DNA sequences
which encode them and their modulating compounds are useful for
diagnosing, treating or preventing disorders associated with aberrant
expression of PMMW, particularly cell proliferative disorders (for
example arteriosclerosis, hepatitis, polycythaemia vera, psoriasis,
primary thrombocytopaenia or cancer), developmental disorders (for
example anaemia or mental retardation), neurological disorders (for
example Alzheimer's disease, Parkinson's disease or epilepsy),
autoimmune/inflammatory disorders (for example AIDS, allergies, asthma,
autoimmune thyroiditis, Crohn's disease, diabetes mellitus,
glomerulonephritis, Goodpasture's syndrome, multiple sclerosis,
arthritis, osteoporosis, pancreatitis, Sjogren's syndrome) or microbial
infections. The present sequence is the amino acid sequence of a human
PMMW of the invention.

Sequence 742 AA;
Query Match 21.4%; Score 787; DB 7; Length 742;
Best Local Similarity 30.6%; Pred. No. 2.6e-59;
Matches 217; Conservative 124; Mismatches 291; Indels 78; Gaps 20;

QY 16 SYGATIAQGERTRDKMYEPIG-GASCFRRRLNGTHQTCSSYSSGSGVHLINVEADLEF 74
Db 58 SKGTGLCRGNSVERKIYIPLNKTAPCVRLLNATHQIGQSSISGDTGVIHVVEKEEDLQW 117
QY 75 LLSPPPPPYAPMIPPHLFTNNMLRLEAKPKNISVLLINRTNMQKQFSEHLCNPOY 134
Db 118 VLTGPNPFPYVLLSKHFTRLMEKLGKRSRTAGLAVSLTKPSGASGFSVQCPNDG 177
QY 135 SGLNSTSETCDASNPAC-NWNPWGTGLLHEDPPPIYIADLDQVTKLEKCFQDFNNHY 193
Db 178 FGYSNSYGPEFAHREIOMNSLGNLAYEDFSPIFLEDENETKVIKQCYQDHLNLSQ 237
QY 194 ETHALRSLCAVEKSFMSAAVNTVCVRRTNFN--NLGSKYCDPLEGRNVSPCTPES 251
Db 238 GSATFPFLCAQMFHMHAVISTATCMRRSIQSTFSINPEIVCDPLSDYVNWMLKPIN 297
QY 252 QQSETTLETVHTNEKFLIVTCRLDTTTFVGVGLGAMDSLGMGFVFTVAVLLKQLPPQ 311
Db 298 -----TTGTLKPDDRVRVVAATRLDSRSFFWNVAPGASAVASFTVQLAAEAL-QKAPDV 351
QY 312 SKDLHNVLFVTFNGESVDYIGSORFVYDMKELQPTSTGTPTTAFINIDFMDIGTLD 371
Db 352 TTLPRNVMFVFFQGETFDYIGSSRMVYDMKGF-----PVQLENVDSFVELGQVAL 403
QY 372 ISNIKL--H---ALNCTTLAQQLERLNNAVKSPRVGFNLI--QSEMSAHLPPTSQS 423
Db 404 RTSLELWMHTDPVSQKNESVRNQVEDLLALEKSGA-GVPAILRRPNQSQPLPPSLQR 462
QY 424 FLRRDPNFNALIL---NARPTNKYHSTYDDADNVDFTYANTSKDFTQLTEVNDFKSLNP 480
Db 463 FLRA-RNISGWLADHSGAPHNKYQSIYDTAENINVSYPEWLSPEEDINFTVDTAKALA 521
QY 481 DSLQMKVRNVSSIVAMALYQITGKYTGTVKANPLMADEFLYCFLOSADCLPKA---- 536
Db 522 D-----VATVLGALVELAGGTNFSFTVQADPQTVTRLLYGLFKANNWFQSLIRQ 573
QY 537 --ASYPGSQLNTPPMRYISVLGSGSESSGYTVRLGLYLLSQLQ---PDHNRDNCIDL-- 589
Db 574 DLRSYLGDG---PLQHYTAV-----SPTNTTYVQYALANLTGTVNLTRECCQDPDK 624
QY 590 -----PLHYFAGFNNGECRLTTQNYSHALSPAFILIDGYDMSGMYSTW 633
Db 625 VPSENKDLVEYSWVQGLH-SNETDRLPRCVSTARLARALSPAFELS--QMSSTEYSTW 681
QY 634 TESTWQSFARFLRPSNVHQVTTLSVGLIISCLVYIISRSSEVLF 693
Db 682 TESRWKDIRAFLITASKLELITLVGFGIILFSLIVTYCINAKADVLF 731

RESULT 9
AA014235

ID AAO14235 standard; protein; 708 AA.
 AC AAO14235;
 PR 10-MAY-2002 (first entry)
 DT Drosophila presenilin enhancer protein Aph-3 SEQ ID NO: 14.
 XX Human: fruit fly; mouse; rat; cow; presenilin enhancer protein; pen;
 KW Alzheimer's disease; pen-1; pen-1B; pen-2; Aph-2; amyloid beta.
 XX Drosophila melanogaster.
 OS WO200185912-A2.
 PN 15-NOV-2001.
 PD 03-MAY-2001; 2001WO-US014648.
 PF 05-MAY-2000; 2000US-00568942.
 PR (EXEL-) EXELIXIS INC.
 PA Curtis DT, Francis GR, Ellis MC, Ruddy DA, Nicoll SM, McGrath GJ;
 PI WPI; 2002-062245/08.
 DR Presenilin enhancer proteins and polynucleotides useful for modulating
 PT presenilin function and screening for an agent that modulates the
 PT interaction of the protein to a binding target.
 PS Disclosure; Page 52-54; 78pp; English.
 XX The present invention relates to a method of detecting compounds capable
 CC of altering the interaction between a presenilin enhancer protein (such
 CC as pen-1, pen-1B, pen-2 and Aph-2) and presenilin. The inhibition of
 CC presenilin activity causes the production of amyloid beta to be reduced
 CC and thus be used in the treatment of Alzheimer's disease. The present
 CC sequence is a presenilin enhancer protein described in the
 CC exemplification of the invention
 XX Sequence 708 AA;
 SQ
 Query Match 21.4%; Score 786.5; DB 5; Length 708;
 Best Local Similarity 30.5%; Pred. No. 2.7e-59;
 Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;
 QY 12 LLLISYGATIA---QGERTRDKMVEPIG-GASCPRRLNGTHOTGCSSTVSGVGVHLIN 67
 DB 17 LLLSFCVLLAGLCRGNSVERKIYIPLNKATPCVRLNATHOIGCQSSISGDTGVHVVE 76
 QY 68 VEADLEFLISSPPSPYAPMIPHLFTRNNMLKKEAGPKNSVLLINRNTQMKSHE 127
 DB 77 KEEDLQWLTDGPNPYVLLSKETFTDLMLKLGRTSRAGLAVSLTKPSAGSFP 136
 QY 128 LNCNPOYGLNSTSTCDASNPAPK-NWNPWGTLHEDFPPIYIADIDQVTKLEKCFQ 186
 DB 137 VQCPNDGFGVYSNSYGPFAHCKREIQWNSLGNGLAYEDFSPFIILEDENETKVIKQCVQ 196
 QY 187 DENNHNETHALRSICAVEVKSFMGAANVTEVCMRTFIN--NUGGSKYCDPLGRNV 244
 DB 197 DNLNQSAGAPFPFLCAMQLFSHMAVISTATCMRRSSIQSTFSINPEIVCDPLSDYNVW 256
 QY 245 PPTPESQSETTLETVHNEFIWVTRCLDTTMTDFDGVGLGAMDSLMGFVTHVAIL 304
 DB 257 SMLKPIN---TTGLKPDPRVVVAAYFLDSRSFVWVAPGASAVAFVTLAAAL 311
 QY 305 KQLLPQSKDLHNLVFTFNGESYDIYSQRFVYDMKQLQPTSTGTPTPIAFDNIDFML 364
 DB 312 -QKAPDVITLPRNVFVFGQETFDYIGSSRWVYDMKGF-----PVQLENVDSFV 362
 QY 365 DIGTLDDISNKL--H-----ALNGTTLAQOILERNVAKSPRYGFNINI--QSEMSAHL 416

Db 363 ELGQVALRTSLMWMHTDPVSKNESVRNQVEDLLATLEKSGA-GVPAVILRRPMSQPL 421
 QY 417 PPTSAQSEFLRDPNFNALIL---NARPTNKYYHSTYDDADNVDFTYANTSKDFTOLTENV 473
 Db 422 PPSLQRFELRA-RNISGVVLADHSGAFHKKYQSIYDTAENINVSYPEWLSPEEDLNFVT 480
 QY 474 DFKSLNPDLSQMKVRNVSIVAMALYQITKEYTGTGVANPLMADEFYLCFQSGADCLP 533
 Db 481 DTAKALAD-----VATLGRALYELAGGTNFDVTQADPQTVTRLLYGLFIKANNSW 532
 QY 534 FKA-----ASYPGSQTNLPMRYISVLGSGQSSGYTYRLLGYLLSLQ---PDHED 584
 Db 533 FQSILRQDLRSYLGDG---PLQHIIV-----SPTNTTYVQVALANLTQTVVNLTR 583
 QY 585 NCTDL-----PLHYFAGFNIGECRLTTONYSHALSPAFIDGYDWS 626
 Db 584 QCQDPSKVPSEKOLYEXSWQPLH-SNETDLPRVCRSTARLARALSPAFELS--QWS 640
 QY 627 SCMYSTWTESTWSQSFARIFLPPSNVHOVTLSGIVVLIISFCLVYIISRSEVLF 683
 Db 641 STEYSTWTESRWKOIRARIFLFIASKLELITLTGVGILFSLIVTYCINAKADLVF 697
 RESULT 10
 AAY97549
 ID AAY97549 standard; protein; 709 AA.
 XX AAY97549;
 AC AAY97549;
 DT 12-FEB-2001 (first entry)
 DE Human PAMP protein sequence.
 XX PAMP; human; presenilin associated membrane protein; immunogen;
 KW neurodegenerative disease; Alzheimer's disease; Lewy body variant;
 KW Parkinson's disease-dementia complex; neuropsychiatric disease;
 KW schizophrenia; age-associated memory loss; developmental disorder;
 KW neoplasm; diagnosis.
 XX Homo sapiens.
 OS WO2000060069-A1.
 PN 12-OCT-2000.
 PD 03-APR-2000; 2000WO-CA000354.
 PR 01-APR-1999; 99US-0127452P.
 PR 30-DEC-1999; 99US-0173826P.
 XX (UTOR) UNIV TORONTO GOVERNING COUNCIL.
 PA St George- Hyslop PH, Fraser PE;
 PI WPI; 2000-665001/64.
 DR N-PSDB; AAA37885.
 DR Isolated presenilin associated membrane proteins and nucleic acids
 PT encoding them, useful for investigating and diagnosing Alzheimer's
 PT disease and other neurodegenerative diseases.
 PS Claim 2; Page 68-70; 79pp; English.
 CC This sequence is the human presenilin associated membrane protein (PAMP)
 CC of the invention. PAMP polypeptides may be used as an immunogen to
 CC generate antibodies that recognise the PAMP polypeptide. The PAMP
 CC nucleotide and protein sequence may also be used for diagnosing
 CC individuals who are at risk or who have a variety of neurodegenerative
 CC diseases (e.g. Alzheimer's disease, Lewy body variant, Parkinson's
 CC disease-dementia complex), neuropsychiatric diseases (e.g. schizophrenia,
 CC age-associated memory loss), developmental disorders, and neoplasms.
 CC These may further be used to deduce the structural organisation and
 CC topology of PAMP, to identify proteins which interact with PAMP either in

Db 364 ELGQVALRTSLELWHTDPVSKNESVQVEDLLATLEKSGA-GVPVILRRNQSOPL 422
 QY 417 PPTSAQSFRLRDPNENALIL--NARPTNKYHSTYDDADNVDFTYANTSKDTQLTEVN 473
 Db 423 PPSLQRFRLA-RNIGSVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFTV 481
 QY 474 DFKSLNPDSLQMKVRNVSIVAMALYQITGKEYTGTQVKNPLMADEFLYCLQASDCPL 533
 Db 482 DTAKALAD-----VATVIGRALYELAGTNSDTVQADPQVTRLLYGLFIKANNSW 533
 QY 534 FKA-----ASYPGSQLTNLPPMYISVLGGSSQSSGYTRLLGYLLSOLQ---PDHRO 584
 Db 534 FQSIQLQDLRSYLGDG---PQHYIAV-----SSPTNTTYVQYALANLTGTVMNLTRE 584
 QY 585 NCTDL-----PLHYFAGFNNGECRLTTQNYSHALSPAFIDGYDWS 626
 Db 585 QCQDPSPKVPSENKDYEYSWVQGPLH-SNETDRLPRCVRSTARLARALSPAFELS--QWS 641
 QY 627 SGMYSTWTSTWSQSFARIFLRPSNVHVTLSVGIIVLLISFCLVYIISRSSEVLF 683
 Db 642 STEYSTWTSTWSKDIRARIFLASFKELELITLVGFGILIFSLIVTYCINAKADVLF 698

RESULT 13

AA039096
 ID AAM39096 standard; protein; 709 AA.

AC AAM39096;

XX 22-OCT-2001 (first entry)

DE Human polypeptide SEQ ID NO 2241.

KW Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
 KW peripheral nervous system; neuropathy; central nervous system; CNS;
 KW Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
 KW amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
 KW chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
 KW leukaemia.

OS Homo sapiens.

XX WO200153312-A1.

XX 26-JUL-2001.

XX 26-DEC-2000; 2000WO-US034263.

XX 23-DEC-1999; 99US-00471275.

XX 21-JAN-2000; 2000US-00488725.

XX 25-APR-2000; 2000US-00552317.

XX 20-JUN-2000; 2000US-00598042.

XX 19-JUL-2000; 2000US-00620312.

XX 03-AUG-2000; 2000US-00653450.

XX 14-SEP-2000; 2000US-00662191.

XX 19-OCT-2000; 2000US-00693036.

XX 29-NOV-2000; 2000US-00727344.

XX (HYSE-) HYSEQ INC.

XX Tang YT, Liu C, Asundi V, Chen R, Ma Y, Qian XB, Ren F, Wang D;

XX Wang J, Wang Z, Wehrman T, Xu C, Xue AJ, Yang Y, Zhang J, Zhao QA;

XX Zhou P, Goodrich R, Drmanac RT;

XX WPI; 2001-442253/47.

XX N-PSDB; AA158252.

XX Novel nucleic acids and polypeptides, useful for treating disorders such
 as central nervous system injuries.

XX Example 4; SEQ ID NO 2241; 10078pp; English.

CC The invention relates to human nucleic acids (AA157798-AA161369) and the
 CC encoded polypeptides (AAM38642-AA42213) with nootropic,
 CC immunosuppressant and cytostatic activity. The polynucleotides are useful
 CC in gene therapy. A composition containing a polypeptide or polynucleotide
 CC of the invention may be used to treat diseases of the peripheral nervous
 CC system, such as peripheral nervous injuries, peripheral neuropathy and
 CC localised neuropathies and central nervous system diseases, such as
 CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
 CC lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
 CC utilisation of the activities such as: Immune system suppression,
 CC Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
 CC and thrombolytic activity, cancer diagnosis and therapy, drug screening,
 CC assays for receptor activity, arthritis and inflammation, leukaemias and
 CC C.N.S disorders. Note: The sequence data for this patent did not form
 CC part of the printed specification

XX Sequence 709 AA;

Query Match 21.4%; Score 786.5; DB 4; Length 709;
 Best Local Similarity 30.5%; Pred. No. 2.7e-59;
 Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;

QY 12 LLILSYGATIA---QGERTRDKMVEPIG-GASCPRLRLNGTHQTCSSYSSGVGLHLIN 67
 Db 18 LRLLSFCVLLAGLCRGNSVERKIYIPLNKTAFCVRLNATHQICQSSISGDTGVHIVE 77
 QY 68 VEADLEFLSPSPSPYAPMIPPHLFRNNLMRLKEAGPKNISVLLINRTNQMKQFSHE 127
 Db 78 KEEDLQWLVTGDPNPPYMWLLESKHFTDLMEKLGRTSRIAGLAVSLTKPSPASGSPS 137
 QY 128 LNCPNQYSLNSTSETCDASNPAP-KWNPNGTGLLHEDFPPIYIADLQVTKLEKCPQ 186
 Db 138 VQCPNDGFGVYSNSYGPEFAHCREIQWNSLGNLAYEDFSFPLEDENETKVIKOCYQ 197
 QY 187 DFNNHNYETHALRSCLAVEVKSFMFAVNTVCWRRTNFIN--NLGSKYCDPLEGRNVS 244
 Db 198 DHNLSQNGSAPTPCLAMQOLFSEHMAVISTATCMRSSISQSTFSINPEIVCDPLSDYNVW 257
 QY 245 PPTPESQSQSETLETVHTNEKFIPLVTCRLDTTTFMDGVGLGAMDSLMGFAVETHAYLL 304
 Db 258 SMLKPIN-----TTGTLKPDPRVVAATRLDSRSFFWNVAPGSAVASFVTLAAAEAL 312
 QY 305 KOLLPPQSKDLHNVLFVTNGESYDYIGSORFYVDMKLOPPTTESTGTPPIAFDNIQFML 364
 Db 313 -QKAPDVTTLPRNVMFVFFQGETFDYIGSRMYDMKGF-----PVQLENVDSFV 363
 QY 365 DIGTLDDISNKL--H-----ALNGTTLAQQLERLNNYAKSPRYGFNLNI--QSEMSAHL 416
 Db 364 ELGQVALRTSLELWHTDPVSKNESVQVEDLLATLEKSGA-GVPVILRRNQSOPL 422
 QY 417 PPTSAQSFRLRDPNENALIL--NARPTNKYHSTYDDADNVDFTYANTSKDTQLTEVN 473
 Db 423 PPSLQRFRLA-RNIGSVLADHSGAFHNKYQSIYDTAENINVSYPEWLSPEEDLNFTV 481
 QY 474 DFKSLNPDSLQMKVRNVSIVAMALYQITGKEYTGTQVKNPLMADEFLYCLQASDCPL 533
 Db 482 DTAKALAD-----VATVIGRALYELAGTNSDTVQADPQVTRLLYGLFIKANNSW 533
 QY 534 FKA-----ASYPGSQLTNLPPMYISVLGGSSQSSGYTRLLGYLLSOLQ---PDHRO 584
 Db 534 FQSIQLQDLRSYLGDG---PQHYIAV-----SSPTNTTYVQYALANLTGTVMNLTRE 584
 QY 585 NCTDL-----PLHYFAGFNNGECRLTTQNYSHALSPAFIDGYDWS 626
 Db 585 QCQDPSPKVPSENKDYEYSWVQGPLH-SNETDRLPRCVRSTARLARALSPAFELS--QWS 641
 QY 627 SGMYSTWTSTWSQSFARIFLRPSNVHVTLSVGIIVLLISFCLVYIISRSSEVLF 683
 Db 642 STEYSTWTSTWSKDIRARIFLASFKELELITLVGFGILIFSLIVTYCINAKADVLF 698

RESULT 14
 AAU79385

AAU79385 standard; protein; 709 AA.
AAU79385;
02-JUL-2002 (first entry)
Human presenilin associated membrane protein (PAMP).
PAMP; Presenilin associated membrane protein; neuropsychiatric disorder; neurodevelopmental disorder; schizophrenia; neurodegenerative disorder; Alzheimer's disease; Lewy body variant; mild cognitive impairment; depression; benign senescent forgetfulness; psychosis; schizoaffective; schizotypal; schizophrenia; delusional disorder; personality disorder; schizoid personality disorder; schizotypal personality disorder; paranoid personality disorder; human.
OS Homo sapiens.
XX WO200218434-A2.
XX 07-MAR-2002.
XX 31-AUG-2001; 2001WO-CA001243.
XX 01-SEP-2000; 2000US-0229889P.
XX (UTOR) UNIV TORONTO GOVERNING COUNCIL.
XX St George- Hyslop PH, Fraser PE;
XX WPI; 2002-329756/36.
XX N-PSDB; ABK48341.
XX Use of (gene encoding) presenilin-associated membrane protein as reagent for diagnosing individuals predisposed to or having
XX neuropsychiatric/neurodevelopmental disorder, or as therapeutic target for treating disorder.
XX Example 1; Fig 1A-B; 69pp; English.
XX The invention describes the use of presenilin-associated membrane protein (PAMP) as a reagent for diagnosing individuals predisposed to or having neuropsychiatric or neurodevelopmental disorder (NND), or for identifying a compound useful for treating NND, or as a therapeutic target for treatment of NND. The protein is useful for diagnosing individuals predisposed to or having NND e.g. schizophrenia, by detecting mutation in gene encoding PAMP by measuring level of transcriptional activity of the gene, or by measuring PAMP activity which comprises PAMP expression level or activity of a product of a PAMP modified substrate. Transgenic animal models can be screened for compounds that modulate activity of PAMP and the presenilins. The identified compounds, or gene therapy with PAMP, can be used to treat neurodevelopmental disorders, neurodegenerative disorders e.g. Alzheimer's disease and Lewy body variant, and neuropsychiatric disorders such as depression, mild cognitive impairment and benign senescent forgetfulness, schizophrenia and related psychoses e.g. schizoaffective, schizotypal, schizophrenia and delusional disorders and personality disorders such as schizoid personality disorder, schizotypal personality disorder and paranoid personality disorder. This is the amino acid sequence of a human presenilin associated membrane protein (PAMP), described in the invention
XX Sequence 709 AA;
Query Match 21.4%; Score 786.5; DB 5; Length 709;
Best Local Similarity 30.5%; Pred. No. 2.7e-59;
Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;
QY 12 LLLLSYGATIA---QGETRDMWEPIG-GASCFFRLNGTHQTGCSSTYSVGVLHLIN 67
Db 18 LRLLSFCVLLAGLCRGNSVERKIYIPLNKATPCVRLNATHQIGQSSISGDTGVHVE 77
QY 68 VEADLEFLSSPPSPYAPMIPPHLFTNNMLRLKEAGPKNISVLLINRTNMQKFSHE 127

Db 78 KEEDLQWLTDGPNPPYVLLSKIFTRDLMEKLGKRTSRIAGLAVSLTKPSPASGFSFS 137
QY 128 LNCPNQYGLNSTSETCDASNPAPK-NWNPWGTLGHEDFPPIYIYIADLDQVTKLEKCFQ 186
Db 138 VOCPNDFGVYSNSYGPFAHCREIQWNSLGNLAYEDFSPFILEDENETKVIKQCQY 197
QY 187 DENNENYETHALRSICAVEVKSFMASAAVTEVCMTERTFIN--NLGGSKYCDPLGRNV 244
Db 198 DHNLQSGASPTFFLCAMQLFSHMAVISTCMRSTSIQSTFSINPEIVCDPLSDYNW 257
QY 245 PPCTESQSETTLETHTNEKFIIVTCLDTTTFMDGVGLGAMDSLMGFAVTHVAYLL 304
Db 258 SMLKPIN-----TTCGLAPDRVVVAARLDSRSPFWVAPGASAVAFVTLAAAL 312
QY 305 KQLLPQSKDLHNVLFVTENGESYDIQSOFVYDMEXLQPTSTGTPTPIAFDNFML 364
Db 313 -QKAPDVTTLPNVNMFVFFQGETFDYIGSSRMVYDMEXGKF-----PVQLENVDSFV 363
QY 365 DIGTLDDDISNKL--H---ALNGTTLAQQLLERLNNYAKSPRYGFNLI--QSEMSAHL 416
Db 364 ELGQVALRTSLELMWHTDPVSKNESVRNQVEDLLATLEKSGA-GVPAVILRRPNQSQPL 422
QY 417 PPTSAQSFILRRDPNFNALIL---NARPTNKYHYSTYDDADNVDFTYANTSKDFTOLTENV 473
Db 423 PPSILQRFELRA-RNISGVVLADHSGAFHKYQSYDYTAENINVSYPFWLSPEEDLNFTV 481
QY 474 DFKSLNPDSLOMKVNRVSSIVAMALYQITITKEYTGTGVANPLMADEFLYCFLOSADCL 533
Db 482 DTAKALAD-----VATVLGRALYELAGGTNFSDTVQADPQTVTRLLYGLFKANNWS 533
QY 534 FKA-----ASYPGSQLNLPPMYISVLGGSQSSGYTYRLLGLVLLSLOLQ----PDHSD 584
Db 534 FQSILRQDLRSYLDG-----PLQHYIIV-----SPTNTTYVQVYALANLTGTVVNLTRE 584
QY 585 NCTDL-----PLHYFAGFNNICECRLTTQNTYSHALSPAFIDGVDWS 626
Db 585 QCQDPKVPSENKDIYEYSWVQGPLH-SNEIDRLPCVRSSTARLARALSPAFELS--QWS 641
QY 627 SGMYSTWTSTESWQSFARIFRPSNVHQVTLISGVIVVLIISPCLVYIISRSSEVLF 683
Db 642 STEYSTWTSTESWQSFARIFRPSNVHQVTLISGVIVVLIISPCLVYIISRSSEVLF 698
RESULT 15
AAU98012
ID AAU98012 standard; protein; 709 AA.
XX AAU98012;
AC AAU98012;
DT 27-AUG-2002 (first entry)
XX Human aminopeptidase Nicastrin.
DE Human; Nicastrin; aminopeptidase; Alzheimer's disease; presenilin;
XX amyloid precursor protein; APP; vaccine; neurotropic; neuroprotective;
KW antiinflammatory; cardiant; cytostatic; inflammation; cancer;
KW cardiovascular disease; Notch.
XX Homo sapiens.
OS Homo sapiens.
XX Key Location/Qualifiers
FH Domain 207..503
FT /label= Aminopeptidase_domain
FT /note= "This domain is claimed in claim 8"
XX WO200229023-A1.
XX 11-APR-2002.
XX 02-OCT-2001; 2001WO-GB004390.
XX 02-OCT-2000; 2000GB-00024086.
XX

(INPH-) INPHARMATICA LTD.

Fagan RJ, Overington JP, Swindells MB, Weir M;

WPI; 2002-463232/49.

DR N-PSDB; ABK52302.

Nicastrin protein identified as an aminopeptidase, useful for diagnosis, prevention and treatment of a disease e.g. inflammation, cancer, or cardiovascular disease.

Disclosure; Page 47; 68pp; English.

The invention relates to a polypeptide consisting of the aminopeptidase domain (I) of the Nicastrin polypeptide. Nicastrin is included in the presentin/B-APP (amyloid precursor protein) complex and is involved in Alzheimer's disease. Also included are an aminopeptidase inhibitor, for use in the treatment and diagnosis of Alzheimer's disease, which effectively inhibits the aminopeptidase activity of the Nicastrin polypeptide; a purified nucleic acid molecule which encodes (I); a vector comprising the nucleic acid; a host cell transformed with the vector; identifying (M1) a candidate ligand for the treatment of Alzheimer's disease, by testing the ability of an aminopeptidase inhibitor to bind to the Nicastrin polypeptide or to (I), and selecting as a candidate agent, an aminopeptidase inhibitor that effectively inhibits the biological activity of the polypeptide; a vaccine composition comprising (I) or its encoding nucleic acid; a transgenic or knockout non-human animal that has been transformed to express a higher, lower or absent level of (I); and diagnosing (M2) the susceptibility of a patient to Alzheimer's disease, by examining the Nicastrin polypeptide or gene sequence in the patient or in the tissue from the patient and diagnosing as susceptible those patients in which a mutation is contained in a region of the sequence that is responsible for aminopeptidase activity in the full length protein. A pharmaceutical based on the inhibitor, peptide, nucleic acid, vector or antibody is useful in therapy or diagnosis of inflammation, cancer, or cardiovascular disease. (M1) is useful for identifying a ligand which prevents the activity of the polypeptide as an aminopeptidase, and inhibits the interaction of the aminopeptidase domain of Nicastrin with a naturally-occurring peptide, such as the full length beta amyloid precursor protein (B-APP), the beta-secretase cleaved version of the B-APP, the alpha-secretase cleaved version of B-APP, presentin 1, presentin 2, or a member of the Notch protein family. The present sequence represents Nicastrin

Sequence 709 AA;

Query Match 21.4%; Score 786.5; DB 5; Length 709;

Best Local Similarity 30.5%; Pred. No. 2.7e-59;

Matches 219; Conservative 127; Mismatches 290; Indels 81; Gaps 21;

12 LLILSYGATIA---QGBTRDKMYEPIG-GASCFRLRLNGTHQTCCSSTYSVGVLLHLIN 67
18 LRLLSFCVLLAGLRGNSVERKIYIPLNKTAPCVLLNATHQIGQSSISGDTGVHVE 77
68 VEADLEFLSSPPSPYAPMIPHLFTRNLMLKEAGPKNISVLLINRTNMQKQFSHE 127
78 KEEDLQWLVTGDNPPYVWLLSKHFTFRLMEKLGKRTSIRAGLAVSLTKPSPASGFS 137
128 LNCFNQYSGLNSTSETCDANPAK-NNWPCTGLHDEFPPIYIADLDQVTKLEKCFQ 186
138 VQCPNDGFGVYNSYGEFAHCREIQWNSLONGLAYEDFSPFLLEDENETKVIKQCYQ 197
187 DFNHNYTHALRSCLAVEKFSMAAVNTEVCNRTNFN--NLGSKYCDPLEGRNVS 244
198 DHNLSQNGSAPTPPLCAMQLFSHMHAVISTATCMRRSSIQTSTFSEINPEIVCDPLSDYNW 257
245 PCTPESQSQSETTLETVHTNEKFLVTCRLDTTTFDGVGLGAMDSLMGFVTHVAYLL 304
258 SMLKPIN-----TGTLLKPDPRVVVAATRLDSRSFFWNVAPGAESAFAVFTQLAAAEAL 312
305 KQLLPPQSKDLHNVLFVTENGESVDYIGSORFVYDMEKLOFPTSTGTPIAFDNDPML 364
313 -QKAPDVTTLPRNVMFVFFGTEFDYIGSSRWYDMEKGF-----PVQLENVDSFV 363

QY 365 DIGTDDISNIKL-H-----ALNGTTLAQQILRLNNYAKSPRYGFNLNI--QSEMSAHL 416
DB 364 ELGQVALRTSLELWMHTDPVSKQNBESVRNOVEDLLATLEKSGA-GVPAVILRRPQSQPL 422
QY 417 PPTSAQSFLRRDPNPNALIL---NARPTNKYHYSTYDDADNVDFTYANTSKDFTQLTENV 473
DB 423 PFSSIQRFELRA-RNIGGVVLADHSGAFHNKYQSYIDTAENINVSYPEWLSPEEDLNFVT 481
QY 474 DFKSLNPDLSQMKVRNVSSIIVAMALYQITIGKEYTGTKVANPLMADEFLYCFQSQADCP 533
DB 482 DTAKALAD-----VATVLGRALYELAGTNSDSTVQADPQTVTRLLYGLFLIKANNSW 533
QY 534 FKA-----ASYPSQSLTNLPPMYISVLGSSQSSGTYRLLGYLLSLOQ---PDIHRD 584
DB 534 FQSILRQDLRSYLDG-----PLQHYIAV-----SSPTNTTVVOVALANLTGTVVNLTR 584
QY 585 NCTDL-----PLHYFAGFNICECLTTONYSHALSPAFIDCYDWS 626
DB 585 QCQDPSPKVPSENKDIYYSWVGGLH-SNETDRPCVRSTARLARALSPAFELS--QWS 641
QY 627 SGMYSTWTESTWSQFSARIFLRPNVHVQVTLVSVGVVLLISFCLVYIISRSEVLF 683
DB 642 STEYSTWTESTSRWKDIRARIFLIASKELELITLTGVGILIFSLVTVYCINAKADVLF 698

Search completed: March 18, 2004, 12:02:54

Job time : 54.9665 secs